Insurance
Information
Institute

THE FACT BO

1991 Property/ Casualty Insurance Facts

Property/Casualty Insurance at a Glance

The property/casualty insurance business early in 1990 comprised about 3,900 individual companies which operate in a highly competitive environment. Although about 900 of those companies write most of the business, no single company or group has more than 10 percent of the market, and the 10 largest companies account for less than 40 percent of the market.

In 1989, property/casualty insurance companies employed some 546,100 persons, according to government statistics. An additional 659,800 persons were engaged in agency or brokerage operations and insurance service organizations on behalf of the insurance industry as a whole, including property/casualty, life and accident, and health segments.

OPERATING RESULTS, PROPERTY/CASUALTY INSURERS, 1987-1989

	1989 ($1,000)	1988 ($1,000)	1987 ($1,000)	% change 1988–89	% change 1987–88
Assets	$526,985,299	$476,929,318	$426,710,547	+10.5	+11.8
Net premiums written	208,387,953	202,014,698	193,245,779	+3.2	+4.5
Premiums earned	206,669,462	199,978,326	188,989,175	+3.3	+5.8
Losses and adjustment expenses incurred	169,372,469	156,696,193	147,379,897	+8.1	+6.3
Loss and loss adjustment ratio	81.95%	78.35%	77.98%	+4.6	+0.5
Underwriting expenses incurred	54,248,850	51,942,721	49,045,206	+4.4	+5.9
Underwriting expense ratio	25.98%	25.71%	25.37%	+1.1	+1.3
Combined ratio (before dividends to policyholders)	107.93%	104.06%	103.35%	+3.7	+0.7
Combined ratio (after dividends to policyholders)	109.23%	105.45%	104.69%	+3.6	+0.7
Statutory underwriting gain (loss)	(16,489,129)	(8,391,819)	(7,078,243)	+96.5	+18.6
Dividends to policyholders	2,713,420	2,775,958	2,546,258	-2.3	+9.0
Net underwriting gain (loss)	(19,202,549)	(11,167,777)	(9,624,501)	+71.9	+16.0
Net investment income	31,207,257	27,723,269	23,959,981	+12.6	+15.7
Operating earnings after taxes	9,060,470	12,888,726	10,988,400	-29.7	+17.3
Policyholders' surplus	133,972,436	118,194,802	103,996,200	+13.3	+13.7
Premium to surplus ratio	1.56 to 1	1.71 to 1	1.86 to 1		
Dividends to stockholders	5,523,131	4,852,941	4,364,202	+13.8	+11.2

Source: A.M. Best Company, Inc., Best's Aggregates & Averages

Insurance
Information
Institute

110 William Street
New York, N.Y. 10038
(212) 669-9200

THE FACT BOOK

1991
Property/Casualty Insurance Facts

To the Reader

Single events occurring at various locations and times are too disparate to permit meaningful evaluation or interpretation. But by compiling these hundreds, thousands of single events and grouping them into statistical units, trends and patterns begin to emerge. The past takes on shape and may provide hints of the future.

Insurance Facts offers thousands of facts relating to the property/casualty insurance industry conveniently packaged for quick and easy reference. The book is divided into chapters — for example, Scope of the Business, Dollars and Cents of the Business, Factors Affecting Costs, Losses by Category. Within these chapters are statistics about nuclear insurance, premium taxes, the world insurance market, catastrophes of 1989, drunk driving laws, accidents by age of drivers and much more.

We are grateful for the cooperation and assistance of other insurance organizations, government agencies and commercial publishers of data in getting all these figures together. We particularly thank A.M. Best Company, Inc., the National Fire Protection Association, the National Safety Council and the Insurance Institute for Highway Safety and the Highway Loss Data Institute.

Thank you for your interest in *Insurance Facts.*

Mechlin D. Moore, President
Insurance Information Institute

The Fact Book is published by the Insurance Information Institute, an educational, fact-finding and communications organization for all lines of insurance except life and health. Western Insurance Information Service (WIIS), which is affiliated with the Insurance Information Institute, provides consumer information services in 10 western states.

The Fact Book contains material from numerous sources. Because these sources define and collect data in various ways, and, moreover, are constantly refining the data, differences among similar data may occur.

ISBN 0-932387-23-3

Copyright © 1991 Insurance Information Institute. All rights reserved.

Contents

1 Scope of the Business

Overview of Insurance 5
Property/Casualty Insurance in 1989: A Review 6
Federal Government Actions 6
The Insolvency Issue 8
Auto Insurance Issues 9
Worker's Compensation 11
The Earthquake Project 12
Property/Casualty Insurance Companies by State 12
Employment in Insurance 13
Ownership of Insurance 14
The World Insurance Market 15

2 Dollars and Cents of the Business

Net Premiums Written by Line 16
Assets and Policyholders' Surplus 17
Where the Premium Dollar Goes 18
Operating Results, Property/Casualty Insurers 19
Profitability: Insurance and Other Industries 20
Investments of Property/Casualty Insurers 21
Net Premiums Written, 1980-1989 22
Automobile Insurance 23
Homeowners Multiple Peril Insurance 24
Commercial and Farmowners Multiple Peril Insurance 25
Crop-Hail Insurance 26
Who Pays the Premium Dollar? 26
Fire Insurance and Allied Lines 27
General Liability Insurance 28
Workers' Compensation Insurance 29
Surety and Fidelity 30
Burglary and Theft Insurance 31
Boiler and Machinery Insurance 31
Glass Insurance 32
Inland Marine Insurance 32
Ocean Marine Insurance 33
Nuclear Insurance 33
Direct Written Premiums by State 34
Premium Taxes 40
Insurance Guaranty Funds 41

3 Shared Markets

The Automobile Shared Market 43
Insurance through FAIR Plans 44
Insurance through Beach and Windstorm Plans 45

4 Government Insurance Programs

Flood Insurance in the United States 46
Federal Crime Insurance 48

5 Factors Affecting Costs

Trends in Costs of Goods, Services, and Insurance 49
Health Care Costs 51
Personal Injury Lawsuits 53
Medical Malpractice 54
The Civil Justice System 56
Tort Reform Provisions 57

6 Losses by Category

Fire Losses 62
Fire Fatalities 62
Leading Causes of Fires 63
Arson 64
Structural Fires 64
Multiple Death Fires 66
Large-Loss Fires 67
The Catastrophe Record, 1989 68
Catastrophes during the Last Decade 70
Hurricanes Reaching the United States 70
Tornadoes in the United States 72
Earthquakes in the United States 74
Motor Vehicle Accidents 75
Motor Vehicle Deaths by State 76
Accidents by Age of Drivers 76
Sex of Drivers 77
The Drinking Driver 78
Locations of Auto Accidents 80
Auto Accident Claim Costs 80
Low-Speed Crash Tests 81
Auto Collision Insurance Claims 82
Automobile Personal Injury Claims, Passenger Cars 84
Accidental Deaths 86
Deaths in Home Accidents 86
Accidents at Work 87
Occupational Disease 89
Aircraft Accidents 91
Health Insurance Benefits 93
Crimes against Property 95
Arrests by Age Group 96
Motor Vehicle Thefts 97
Insured Automobile Theft Losses 99

7 Laws Affecting Motorists

Automobile Financial Responsibility and Compulsory Laws 100
No-Fault Automobile Insurance 101
Automobile Seat Belt Laws 102
Drunk Driving Laws 103

8 Glossary & Directory

Glossary 107
State Insurance Commissioners 114
Insurance and Service Organizations 117
Member Companies and Groups, Insurance Information Institute 126
Index 130

Scope of the Business

Overview of Insurance

Insurance in the United States is divided into two broad categories: life and health insurance, and property and casualty insurance. Altogether it provides more than 2 million jobs and has responsibility for assets which at the end of 1989 totaled more than $1.8 trillion.

The property/casualty segment of the insurance business is responsible for assets which, at the close of 1989, totaled nearly $527 billion.

Premium receipts in 1989 for these insurance segments were: property/casualty, $206.7 billion; life insurance premiums and annuity considerations, $188.3 billion.

In 1988 (the latest year for which data are available) health insurance premiums (including commercial insurers, Blue Cross and Blue Shield, self-insureds and HMOs) were $192 billion.

Data compiled by the U.S. Bureau of Labor Statistics (BLS) show that property/casualty insurance companies employed some 546,100 persons in 1989, while non-property/casualty companies employed some 862,200 persons. BLS estimates that another 659,800 persons were engaged in agency or brokerage operations and insurance service organizations, but does not distinguish between personnel employed in the life or health insurance business and those in the property/casualty field.

There are more than 6,000 insurance companies based in the United States and operating under the supervision of regulatory authorities in the various states. Some of these companies sell all lines of insurance; many specialize in one or more fields. Some 3,900 of those companies sell some form of property and casualty insurance, and related lines, including inland marine coverages and surety and fidelity bonds. A vast majority of the property/casualty business is written by about 900 companies that operate in all or most states.

The property and casualty insurance business plays a major role in keeping the American economy moving. Insurance coverages backstop the extensive commercial and consumer credit system of the nation. Further, surety bonds are required on almost all public works and commercial construction, to protect against loss in the event a contractor fails to fulfill a contract.

In large part because of insurance coverage, Americans — business owners and employees, home owners, and car owners — have more financial protection and a greater sense of security than any people anywhere have ever enjoyed in the history of the world.

Property/Casualty Insurance in 1989: A Review

The property/casualty insurance industry's profitability declined in 1989, reflecting two major factors: increased price competition and catastrophe claims, notably from Hurricane Hugo and the San Francisco earthquake.

PROFIT (LOSS) IN THE PROPERTY/CASUALTY INSURANCE BUSINESS, 1989 *($ billions)*

Earned premiums	$206.7
Incurred loss (including loss adjustment expense)	-169.4
Underwriting expenses	-54.2
Policyholder dividends and other minor items	-2.7
Underwriting loss	(19.6)
Investment income (dividends and interest)	+31.2
Operating gain	10.4*
Realized capital gains	+ 4.6
Income taxes	-2.8
Net after tax income	$12.2

*Includes miscellaneous items of $1.8 billion.

At $206.7 billion, earned premiums were up only 3.3 percent in1989.

The underwriting loss was $19.6 billion, 75 percent larger than 1988's $11.2 billion.

Pretax operating income of $10.4 billion and net realized capital gains of $4.6 billion were reduced by income taxes of $2.8 billion.

Net income after taxes totaled $12.2 billion, down 18.1 percent from 1988's $14.9 billion.

With policyholders' surplus at $134 billion at the end of 1989, the rate of return for the industry deteriorated to 9.1 percent from 13.2 percent.

Federal Government Actions

The 1990 Congressional season began and ended with the spotlight on insurance solvency. In February, Rep. John Dingell (D-Mich.) released a report, "Failed Promises," on the Energy and Commerce Committee's oversight investigation of six recent insolvencies of relatively large property/casualty insurance companies. The report noted the common elements of mismanagement and fraud and the failure of state regulators to detect warning signs of any of these impending failures.

In September, American Insurance Association (AIA) President Robert Vagley went before the Dingell panel and identified four features that should be included in any enhanced system of insurance regulation: removing impediments to the free flow of capital; removing commercial and excess coverages from guaranty associations; focusing resources and attention on regulation for solvency; and avoiding duplicate and conflicting dual regulation. He also said the AIA was exploring various federal alternatives, including federal minimum standards, that might enhance state regulation for solvency.

Meanwhile, the House Judiciary Committee approved legislation to substantially revise the McCarran-Ferguson Act of 1945, which provides insurers with limited exemption from federal antitrust law. The legislation, which is essentially the same as that which cleared subcommittee in 1988, did not go to the floor of the House for a vote.

Likewise, proposed federal product liability reform legislation cleared the Senate Commerce Committee, but did not come up for a vote in the Senate. Similarly, general aviation product liability bills cleared committees in the House and Senate but went no further.

Two different versions of legislation to create a federal earthquake insurance program were introduced and several preliminary hearings were held in two different House committees.

After many years of effort, and spurred to final action by a spate of coastal oil spills, agreement was reached on major changes in federal liability laws and cleanup programs for offshore oil spills.

Agreement was harder to come by on the federal crop insurance program which has run at a substantial deficit in recent years. The President proposed scrapping it, favoring disaster relief over insurance. The House agreed with the President, but the Senate had indicated that it wants to save the crop insurance program. The issue was still unresolved in October.

The tax questions also were unresolved as the budget debate continued through the fall. A Treasury Department proposal to raise $1.1 billion over five years by changing the tax treatment of salvage and subrogation rights was part of the initial budget package.

In the summer, the U.S. Supreme Court upheld the constitutionality of sobriety checkpoints and the use of videotapes made at the scene of drunk driving arrests. The court also upheld sanctions against attorneys who bring frivolous lawsuits.

The National Highway Traffic Safety Administration rejected a request from insurers and others that bumper standards be returned to the 5 mph rule. So, it remains at 2.5 mph.

The number of failed banks and savings and loans (S&Ls) continued to grow, with the government constantly revising upward its estimates of the total cost of expenditures related to deposit insurance. The official estimate by late fall stood at $150 billion in direct outlay, with interest on required government borrowing bringing the total to between $300 billion and $500 billion. Regulators, encouraged by a decision in the federal courts, announced that they will pursue professional liability claims against many lawyers, accountants and others who helped the now-defunct banks and S&Ls. This is in addition to the pending claims against directors and officers of many failed institutions.

The Insolvency Issue

During 1990 the issue of insolvency received heightened interest mainly because of the high number of failed savings and loans (S&L) banks and the ever-increasing cost of the bailout—$150 billion is now considered the minimum. Some legislators and consumer groups drew a quick and unfounded comparison between the failed S&Ls and the insurance industry.

During 1989, according to the National Association of Insurance Commissioners (NAIC), 23 insurers became insolvent, less than one percent of all insurance companies in the United States. This contrasts with 328 S&Ls going out of business in 1989.

Insurance companies directly pay the costs of insolvencies through assessments from state guaranty funds. In 1989 insolvencies cost state guaranty funds $775 million, and some $3 billion over the years 1985-89.

U.S. Representative John Dingell (D-Mich.), chairman of the House Oversight and Investigations Subcommittee, released a report in February 1990 called, "Failed Promises—Insurance Company Insolvencies," which studied the insolvencies of four major insurance companies. The report cited various parallels between the insurance industry and the S&L debacle, but "found no evidence of an overall crisis threatening the existence of the insurance industry at this time." The report made no final recommendations, but presented several important factors that could bring about insurance company failures—rapid expansion, extensive and complex reinsurance arrangements, underpricing, reserve problems, incompetence, fraud and greed.

Subsequent hearings by the subcommittee heard industry leaders testify how they felt the industry could avoid future insolvencies. Their recommendations included strengthening the central offices of the National Association of Insurance Commissioners; certification of loss reserves by fellows of the Casualty Actuarial Society; annual audits of insurance companies by independent certified public accountants; quick removal of insolvent companies from the market instead of attempts to save them; minimum uniform standards for solvency with a strong enforcement mechanism; and tightened oversight of managing general agents.

In October, Public Citizen, the Naderite consumer activist group, released a report, "Insurance: The Next Industry in Crisis?" which named five property/casualty insurance companies as being financially vulnerable and potentially at risk in a severe economic downturn. The Insurance Information Institute, financial analysts, and the companies themselves were critical of the report's methodology and conclusions. Public Citizen later said that two of the companies should not have been included in the list.

Some industry and trade group leaders feel that the state insurance regulatory departments which vary greatly in staff and expertise should be augmented by a federal agency whose purpose would be to regularly audit insurers for solvency.

However, insurance leaders said a balance must be maintained. Solvency regulation should reduce insolvencies, but it must not impair competition and profitable growth.

Auto Insurance Issues

The passage of Proposition 103 in California on November 8, 1988, generated heightened activity on the auto insurance front in many states. That initiative calls for most insurance rates to be rolled back to what they were on November 8, 1987 and reduced an additional 20 percent below that level. "Good drivers" would be eligible for an extra 20 percent discount on their auto insurance.

The architects of Proposition 103 have been planning efforts in other states similar to the campaign they conducted in California. As a result, auto insurance nationwide has come under intense public scrutiny. Lawmakers are examining rates, claim costs and the varying provisions of auto insurance laws, looking for ways in which the cost of insuring a vehicle can be reduced.

Meanwhile, legislators and representatives of the insurance industry are intensifying their efforts to promote public understanding and discussion of the factors underlying the cost of auto insurance in the hope that new approaches both to cutting costs and meeting consumers' needs may emerge.

In California, the courts are being asked to decide many issues, some arising from the Proposition 103 law itself and others from various attempts to implement it. The difficulties in implementing the initiative are generating proposals to change the way laws in California can be approved at the ballot box. Additionally, the onerous provisions of the law have caused more than half a dozen insurers to withdraw from the California market.

Actions on this issue in California are ongoing. In May 1989, the California State Supreme Court ruled that insurance companies were entitled to a fair and reasonable rate of return, but it did not specify what that rate of return would be. Since that time, the rate of return issue has been in and out of the courts. A survey by California's insurance department made public in August 1990 showed that auto insurance companies insuring in that state lost one cent on every dollar of premiums they received during the period 1985 to 1989. For each $1.07 in reported revenue (including income from investments) insurers spent $1.08, 85 cents of which went toward settlement of claims. In sum, high claims costs generate high rates.

In July 1990, leaders of Voter Revolt, the architects of Proposition 103, announced plans for a new initiative that would force the California insurance industry out of the state and replace it with a state-run nonprofit operation if insurers failed to comply with Proposition 103 regulations.

In Washington state, an initiative has been filed with the legislature to create a state-owned auto insurance company, modeled on the system in British Columbia, which would be the sole source of basic coverage.

In Pennsylvania, a consumer choice no-fault bill has been passed with provisions for rate rollbacks of 22 percent for policyholders who choose the verbal threshold for lawsuits and 10 percent for those with tort liability-based coverage. Insurers challenged the law in court but an injunction blocking the rollback was denied.

In New Jersey, the Governor's bill to revamp the state's auto insurance system is being challenged by insurers in court as unconstitutional on the grounds that it imposed surcharges and taxes (i.e., costs) which they cannot recoup through rate increases. The onerous provisions of the law caused one company to say it would withdraw from the state's auto insurance market, but the Governor has said insurers may not pull out of the auto insurance market unless they leave the state altogether.

In September, the Ninth U.S. Circuit Court of Appeals ruled unconstitutional a Nevada law, passed in 1989, which called for auto insurers to reduce liability rates to a minimum of 15 percent below 1988 levels and to freeze rates for one year. Seven insurance companies challenged the law, saying it violated their due process rights because it prohibited them from increasing their rates if they suffered losses. The court's decision said the law denied insurers a constitutionally guaranteed "fair and reasonable return."

In Arizona, in addition to the rate rollback initiative, signatures were gathered for two other initiatives. One would approve a "choice" no-fault law that would reduce rates by 20 percent for those who choose the no-fault option and the other would amend the constitution to allow the no-fault law to be considered. Not one of these initiatives passed.

Various other measures are underway in other states.

Through its trade organizations, the insurance industry is conducting a variety of auto insurance-related programs to transmit its concerns about auto insurance costs to the public and to receive consumer input. However, the auto insurance environment in some states and the difficulty in making an adequate profit are forcing insurers to reevaluate their business strategies. Several major insurers are withdrawing from the auto insurance market entirely, and some are withdrawing from specific states or are scaling back their auto insurance operations.

A new organization, Advocates for Highway and Auto Safety, has been formed to bring together the insurance industry, consumer advocates and safety organizations to lobby for safer cars and highways.

Workers' Compensation

Rising costs prompted providers and purchasers of workers' compensation insurance to examine their workers' compensation programs to determine how the system can be made to work more efficiently. Solutions to cost problems related to workers' compensation are considered essential as states vie with one another to create a climate favorable to business expansions.

Focus Healthcare Management, a Brentwood, Tenn. Company that provides medical cost containment services for employers, insurance carriers and third party administrators suggested that four key developments have led to the current crisis in workers' compensation: 1) Workers' compensation claims, once based largely on acute traumatic injuries, such as the loss of a limb, are increasingly being brought on grounds such as back pain and stress, which require a more subjective diagnosis on the part of the treating physician and push up medical costs. 2) The increased amount of litigation in some states has increased the cost of settlement. In litigated cases, claimants often receive less than half the settlement amount with much of the rest of the sum going to lawyers; are away from work longer; are less likely to receive early vocational rehabilitation; and may undergo unnecessary treatment and medical tests. 3) In an effort to keep costs down, other parts of the health care system have shifted costs to the workers' compensation system. 4) The reluctance of regulators to grant needed increases has meant that losses often exceed the premiums collected.

The Alliance of American Insurers, the American Insurance Association, the National Council on Compensation Insurance , and the National Association of Insurance Commissioners all proposed steps to alleviate the situation.

Several state legislatures took remedial steps. For example:

In California, legislation that raises weekly benefits to the state's injured workers by about 50 percent over the next two years, took effect in January 1990. To offset some of the cost of the $1.4 billion increase in indemnity benefits, the new law requires employees to choose a state-designed medical examiner to evaluate their injuries in disputed cases and restricts the number of these evaluations. In addition, it also limits disability claims caused by stress or psychiatric injuries; speeds up the return-to-work process by requiring injured workers to make a decision on entering vocational rehabilitation within 90 days after they are declared eligible; and expedites the claims settlement process.

In New York, just before adjournment, the legislature passed a bill to raise benefits, which, for partially disabled workers, were the lowest in the nation. The increase in weekly benefits (from a maximum of $150 to $280) for the partially disabled is expected to lower the number of injured workers seeking classification as totally disabled, thus reducing litigation costs and delays in returning to the workplace. Benefits will be the same ($350) for both partially and totally disabled workers in July 1991.

In New Hampshire, a bill that would reform the workers' compensation system, essentially unchanged since 1911, was signed by the governor in May. Key provisions involve a new program for resolving disputes, medical cost containment measures, including a fee schedule, and the use of American Medical Association impairment guidelines for determining benefits.

In Rhode Island, a reform package, designed to lower costs and reduce delays in the settlement of claims, has been signed by Gov. Edward DiPrete. The package includes a benefits bill which, among other things, will require periodic review of partial disability cases to determine any changes in their physical condition; and provide a cost of living adjustment to some partially disabled workers. The new law also authorizes the creation of a competitive state workers' compensation fund.

The Earthquake Project

To prepare the United States for the thousands of fatalities and injuries, billions of dollars of damaged and lost property, and disruption of the economy and financial services that will follow a catastrophic earthquake, a consortium of trade associations and property/casualty insurance companies has formed

The Earthquake Project.

The Project sees a partnership between the federal government and the insurance industry as the best way to guarantee rapid rebuilding and speedy economic recovery after a major earthquake.

To establish a federal earthquake insurance program, the Federal Earthquake Insurance and Reinsurance Act (H.R.4480) was introduced in the House of Representatives in April 1990.

The bill would provide easily available and affordable earthquake insurance coverage for homeowners. It would also create a federally-backed financial reserve to mitigate the impact to the national economy of a major quake. A partnership between the federal government and the private insurance industry would manage the funds collected from premiums. If a major quake strikes before the funds have been sufficiently built up, money would be borrowed from the Treasury and repaid with interest by future premiums.

H.R.4480 provides an equitable means for distributing the cost of such a disaster. The premiums would be low in states with lower earthquake risks and higher along fault lines. Those homeowners who take preventive measures against earthquake damage would receive a discount on their premium.

Another bill, called the National Earthquake Insurance and Reinsurance Act (H.R.4462) was also introduced in the House of Representatives. Patterned after the National Flood Insurance Program, it includes a federally run insurance facility.

Hearings on the bills are expected to continue in 1991.

The activities of The Earthquake Project are being carried out under the auspices of the National Committee on Property Insurance, an insurance industry funded organization located in Boston, Mass., which provides administrative support to The Project.

Property/Casualty Insurance Companies by State

The property/casualty insurance business in the United States comprised 3,900 individual companies in mid-1990, according to information provided by state insurance departments. Although about 900 of these companies write most of the business, no single company or group has more than 10 percent of the market, and the 10 largest companies account for less than 40 percent of the premium volume.

Thirty states house 40 or more companies each. The state with the greatest number of companies is Texas with 287, followed by Illinois with 284.

PROPERTY/CASUALTY INSURANCE COMPANIES BY STATE, 1989

State	Home offices	State	Home offices
Alabama	31	Colorado	52
Alaska	10	Connecticut	47
Arizona	36	Delaware	107
Arkansas	28	District of Columbia	14
California	162	Florida	94

(Table continues)

State	Home offices	State	Home offices
Georgia	59	New Mexico	13
Hawaii	20	New York	205
Idaho	12	North Carolina	72
Illinois	284	North Dakota	45
Indiana	127	Ohio	162
Iowa	202	Oklahoma	54
Kansas	38	Oregon	19
Kentucky	39	Pennsylvania	206
Louisiana	47	Rhode Island	22
Maine	8	South Carolina	29
Maryland	40	South Dakota	52
Massachusetts	51	Tennessee	56
Michigan	65	Texas	287
Minnesota	175	Utah	11
Mississippi	16	Vermont	180
Missouri	213	Virginia	44
Montana	15	Washington	26
Nebraska	77	West Virginia	44
Nevada	7	Wisconsin	190
New Hampshire	37	Wyoming	3
New Jersey	67	**Total**	**3,900**

Source: State Insurance Departments.

Employment in Insurance

Employment in the insurance industry in the United States rose about five percent in 1989.

The Bureau of Labor Statistics (BLS) of the Department of Labor estimated employment by property/casualty insurers was down less than 1 percent, and the number of agents, brokers, and service personnel in all segments of the business increased by nearly 6 percent during the year. The BLS tallied the number of employees working directly for insurance companies at 1,408,300.

The Research Department of the Alliance of American Insurers said that more than half the states have more than 25,000 insurance workers each. The Alliance estimated the entire industry's payroll at more than $69 billion for 1990.

EMPLOYMENT IN INSURANCE, 1980–1989

(Annual averages)

Year	Property/casualty companies	Other companies	Agents, brokers, service personnel	All–industry
1980	477,100	747,000	452,300	1,676,400
1981	478,000	758,460	465,600	1,702,000
1982	478,500	759,300	476,200	1,714,000
1983	469,300	760,000	490,700	1,720,000
1984	467,600	771,700	517,500	1,756,800

(Table continues)

Year	Property/casualty companies	Other companies	Agents, brokers, service personnel	All–industry
1985	474,900	817,000	541,500	1,833,400
1986	499,600	865,700	573,900	1,939,200
1987	528,900	889,300	603,600	2,021,800
1988	549,900	853,900	623,500	2,027,300
1989	546,100	862,200	659,800	2,128,000

Source: Bureau of Labor Statistics, U.S. Department of Labor.

Ownership of Insurance

Some 96 percent of the nation's home owners, but 26 percent of people who rent their homes, carry household insurance to protect themselves against potential financial losses, according to the findings of a national survey conducted by Cambridge Reports, Inc., for the Insurance Information Institute in the last quarter of 1989.

The study found that 67 percent of Americans owned their homes, while 28 percent were renters. (The other 5 percent were people in the military, institutions, etc.)

Since an earlier similar study in 1986, there was a slight increase in the percentage of home owners who carried household insurance, and the percentage of renters who had insurance on their household contents and personal possessions increased about 3 percent.

About half of the country's insured homeowners say they have based their insurance policy limit on the cost of rebuilding their home. Close to one in seven has chosen the limit on the recommendation of an insurance agent, while more than one in 10 reports using an estimate of the value of the home excluding the cost of the land and foundation.

Even though nearly half of the renters think chances are good that they will lose some of their possessions due to fire or theft, the great majority of renters do not have renters insurance to cover the cost of replacing damaged or stolen personal items. Only about one in four renters has an insurance policy, a three-point increase since 1986.

The cost of renters insurance is the top reason cited by uninsured renters for not purchasing insurance. More than two in five uninsured renters have refrained from purchasing insurance for that reason. Lack of valuable items places a distant second on uninsured renters' list of reasons for not buying insurance, followed by unawareness of the availability of renters insurance and a belief that the landlord's insurance policy covers the tenant's possessions.

INSURANCE COVERAGE REPORTED BY U.S. HOUSEHOLDS, 1989

	% of public	% have insurance	% don't have insurance	% not sure
Home owners:				
1989	67	96	3	1
1986	69	95	3	2
1984	67	93	4	3
Renters:				
1989	28	26	70	4
1986	27	23	69	8
1984	29	28	65	8

Source: Insurance Information Institute.

The World Insurance Market

The United States accounted for some 37 percent of the world's premium volume in 1988, according to the Swiss Reinsurance Company, down from 38 percent in 1987. Swiss Re's annual study includes only countries with premium volumes of at least $100 million.

The world's premium income reached $1.171 trillion in 1988, up from $1.070 trillion in 1987. The real growth rate, adjusted for inflation and exchange rates, amounted to 8.6 percent, roughly the same as 1987 (8.5 percent), halting the decline that took place in 1987.

Despite the recovery of the U.S. dollar, the North American (United States and Canada) share of the world insurance market declined about 0.7 percent.

The share of total non-life business decreased again in 1988, down to 47.4 percent from 49 percent in 1987. In 1980, this share was still almost 60 percent; 1987 was the first year the share slipped below 50 percent.

Switzerland again led the world in premium per capita at $2,324, although the Japanese spent almost this same amount. The United States continued third at $1,751 per capita.

THE WORLD'S LEADING INSURANCE COUNTRIES IN 1988

($1 million)

Rank	Country	Non-life premiums	Life premiums	Total premiums	% of total world premiums
1	United States[1]	$254,590	$176,809	$431,399	36.84
2	Japan[2]	70,466	214,104	284,570	24.30
3	West Germany	42,748	36,572	79,320	6.77
4	Great Britain[3]	28,122	40,851	68,973	5.89
5	France	26,635	25,519	52,154	4.45
6	USSR	14,052	15,752	29,804	2.55
7	Canada	13,765	12,774	26,539	2.27
8	Italy	15,168	4,827	19,995	1.71
9	Australia[4]	9,081	9,405	18,486	1.58
10	South Korea[2]	2,775	13,699	16,474	1.41

(1) Net premiums written. (2) March 31, 1988 to March 31, 1989. (3) Estimated or provisional. (4) Includes single premiums.

Source: Swiss Reinsurance Company, *Sigma*, 4/90.

Dollars and Cents of the Business

Net Premiums Written by Line

Premiums written by insurance companies in the United States for all types of insurance totaled nearly $453 billion in 1989. Net premiums written by property and casualty companies totaled more than $208 billion, up $6 billion over 1988's total. Workers' compensation and private passenger auto liability insurance showed the greatest increase in net premium volume.

NET PREMIUMS WRITTEN BY LINE, 1988-1989

	1989	1988	% change
Auto liability, pvt. passenger	$43,976,575,000	$40,812,744,000	+7.8
Auto liability, commercial	12,047,151,000	11,707,484,000	+2.9
Total auto liability	56,023,726,000	52,520,228,000	+6.7
Auto phys. damage, pvt. pass.	29,585,442,000	28,676,435,000	+3.2
Auto physical damage, comm.	5,253,759,000	5,182,808,000	+1.4
Total auto phys. damage	34,839,201,000	33,859,243,000	+2.9
Total automobile	90,862,927,000	86,379,471,000	+5.2
Medical malpractice	4,278,009,000	4,027,825,000	+6.2
General liability	18,434,466,000	19,077,182,000	-3.4
Total non-auto liability	22,712,475,000	23,105,007,000	-1.7
Fire insurance and allied lines*	7,025,122,000	6,924,936,000	+1.4
Homeowners multiple peril	17,670,939,000	17,093,301,000	+3.4
Farmowners multiple peril	944,392,,000	886,161,000	+6.6
Commercial multiple peril	17,468,204,000	17,656,728,000	-1.1
Workers' compensation	28,241,380,000	26,135,309,000	+8.1
Inland marine	4,378,462,000	4,270,747,000	+2.5
Ocean marine	1,206,483,000	1,262,859,000	-4.5
Surety and fidelity	2,697,502,000	2,542,752,000	+6.1
Financial guaranty	505,110,000	502,996,000	+0.4
Burglary and theft	100,583,000	109,409,000	-8.1

*Crop-hail and earthquake insurance premiums are included in allied lines.

(Table continues)

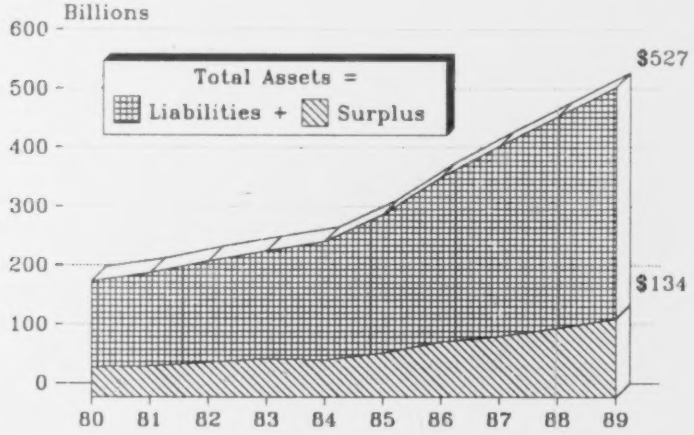
	1989	1988	% change
Boiler and machinery	$623,107,000	$626,071,000	-0.5
Glass	19,830,000	23,681,000	-16.3
Aircraft	547,290,000	690,504,000	-20.7
Accident and health	4,579,572,000	4,699,179,000	-2.5
Other lines	8,804,575,000	9,105,587,000	-3.3
Total, all lines	**$208,387,953,000**	**$202,014,698,000**	+3.2

Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Assets and Policyholders' Surplus

An idea of the strength and reliability of the property/casualty insurance business may be gained from a review of its assets and policyholders' surplus. Traditionally, assets and policyholders' surplus have been reported in terms of aggregate totals, with the result that industrywide figures have included some duplications because of interownerships within company groups. However, consolidated totals, computed by eliminating interownerships, provide a more accurate picture of the industry's financial position. The graph below, based on the consolidated figures, shows that while both assets and policyholders' surplus have been climbing steadily, liabilities have been increasing at a greater rate than surplus.

ASSETS AND POLICYHOLDERS' SURPLUS, 1980-1989



In current dollars, policyholders' surplus rose 157 percent between 1980 and 1989, while assets increased by 167 percent in the same period. However, when allowance is made for inflation, the amount of growth over the 10-year period was much smaller with assets increasing by 77 percent and policyholders' surplus by 71 percent.

Most insurance company assets are invested in government, industrial, and utility bonds, and high grade stocks. Less than 2 percent of property/casualty insurance industry assets are in real estate, less than 1 percent in junk bonds.

CONSOLIDATED ASSETS AND POLICYHOLDERS' SURPLUS, 1980–1989

Year	Assets	Annual % change	Policyholders' surplus	Annual % change
1980	$197,660,794,250	+13.4	$52,196,380,693	+22.9
1981	212,302,741,594	+ 7.4	53,804,788,612	+ 3.1
1982	231,692,712,528	+ 9.1	60,394,591,263	+12.2
1983	249,121,082,570	+ 7.5	65,605,727,424	+ 8.6
1984	264,734,721,825	+ 6.3	63,809,497,216	- 2.7
1985	311,364,665,175	+17.6	75,511,416,755	+18.3
1986	374,088,083,000	+20.1	94,288,390,000	+24.9
1987	426,710,594,000	+14.1	103,996,200,000	+10.3
1988	476,929,318,000	+11.8	118,194,802,000	+13.7
1989	526,985,299,000	+10.5	133,972,436,000	+13.3

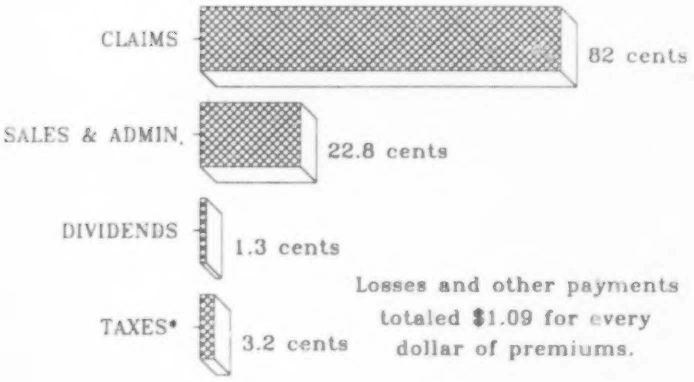
Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Where the Premium Dollar Goes

Claims and the expenses that are involved in adjusting claims accounted for more than 82 cents of every premium dollar taken in by property and casualty insurers in 1989. The overall cost of underwriting operations in 1989 amounted to the equivalent of $1.09 for every premium dollar.

Some companies pay dividends to commercial policyholders that reflect their favorable loss experience or pay dividends that reflect the total loss experience of certain lines of insurance.

SPENDING THE PREMIUM DOLLAR



Losses and other payments totaled $1.09 for every dollar of premiums.

*Excluding federal and foreign income and real estate taxes.
Source: A.M. Best Company, Inc.

Operating Results, Property/Casualty Insurers

In 1989, income from investments rose by 12.6 percent, but net underwriting losses rose by 72 percent.

Profits and losses of property/casualty insurance companies, particularly in recent years, have been subject to greater fluctuations than those of other industries.

The property/casualty business during the last quarter-century has recorded a net underwriting loss, after policyholders' dividends, of more than $145 billion. The industry has shown profits on underwriting operations in only five of the last 25 years.

Investment of capital and surplus accounts and money set aside as loss reserves and unearned premium reserves generated sufficient income to permit companies to continue their insurance operations despite the frequency of underwriting deficits.

PROPERTY/CASUALTY INSURER OPERATING RESULTS, 1965–1989

($1,000)

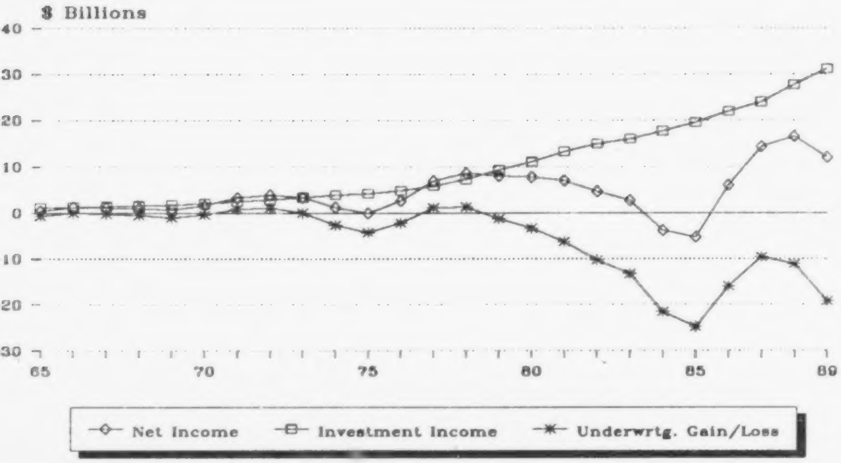
	Underwriting results				
Year	**Statutory underwriting gain/loss**	**Policyholder dividends**	**Net underwriting gain/loss**	**Investment income***	**Combined net income****
1965	$-352,263	$357,267	$-709,530	$1,131,626	$422,096
1966	386,927	406,802	-19,875	1,217,980	1,198,105
1967	233,619	488,577	-254,958	1,351,764	1,096,806
1968	-148,224	420,525	-568,749	1,511,509	942,760
1969	-529,899	518,055	-1,047,954	1,711,806	663,852
1970	77,776	503,558	-425,781	2,005,081	1,579,299
1971	1,381,800	555,629	826,172	2,421,495	3,247,667
1972	1,797,934	736,283	1,061,651	2,799,737	3,861,388
1973	791,761	785,698	6,063	3,325,344	3,331,408
1974	-1,878,371	766,527	-2,644,898	3,832,669	1,187,771
1975	-3,593,959	632,838	-4,226,798	4,150,204	-76,594
1976	-1,558,551	630,100	-2,188,652	4,805,939	2,617,287
1977	1,926,315	814,513	1,111,803	5,815,788	6,927,591
1978	2,548,143	1,251,811	1,296,332	7,289,554	8,585,886
1979	23,606	1,324,377	-1,300,772	9,279,235	7,978,463
1980	-1,712,423	1,621,545	-3,333,968	11,063,492	7,729,524
1981	-4,463,888	1,823,748	-6,287,636	13,248,495	6,960,859
1982	-8,303,039	1,986,827	-10,289,866	14,906,655	4,616,789
1983	-11,087,953	2,234,117	-13,322,070	15,973,234	2,651,164
1984	-19,378,885	2,098,062	-21,476,947	17,659,729	-3,817,218
1985	-22,597,292	2,196,247	-24,793,539	19,507,869	-5,285,670
1986	-13,747,925	2,164,969	-15,912,894	21,924,445	6,011,551
1987	-7,078,243	2,546,258	-9,624,501	23,959,981	14,335,480
1988	-8,391,819	2,775,958	-11,167,777	27,723,269	16,555,492
1989	-16,489,129	2,713,420	-19,202,549	31,207,257	12,004,708

* Industrywide investment income, less investment expenses, before taxes. Figures for years prior to 1977 are aggregates and include some duplications because of interownerships within company groups. Totals from 1977 through 1989 have been consolidated to eliminate such duplications.

**Before taxes. Combined net income includes both underwriting gains or losses and investment income.

Source: A. M. Best Company, Inc., Best's Aggregates & Averages.

OPERATING RESULTS, 1965-1989



Profitability: Insurance and Other Industries

In 1989, the property/casualty insurance industry showed a drop of 4.0 points in its rate of return computed by generally accepted accounting principles (GAAP), and 4.1 points in the rate of return in statutory accounting terms. The GAAP figures are estimates because many insurance companies, particularly mutuals, do not report their data in GAAP terms.

Generally, the return on net worth of the property/casualty insurance business has been considerably less stable over the years than that recorded by other industries.

ANNUAL RATE OF RETURN: NET INCOME AFTER TAXES AS A PERCENT OF EQUITY

	Property/casualty ins.						
Year	Statutory accounting	GAAP accounting*	Diversified financial**	Banks	Utilities	Transportation	Fortune 500***
1980	14.7%	13.1%	14.0%	13.4%	11.7%	11.3%	14.4%
1981	13.3	11.8	11.4	13.0	12.7	13.3	13.8
1982	9.3	8.8	10.0	12.0	12.5	7.9	10.9
1983	9.1	8.3	11.7	12.5	13.3	11.6	10.7
1984	1.7	1.8	9.3	12.6	13.4	13.6	13.5
1985	2.8	4.0	9.4	13.0	13.0	11.5	11.6
1986	13.9	13.6	15.9	12.8	13.3	7.7	11.6
1987	13.2	15.4	16.3	11.1	12.8	9.7	14.4
1988	13.2	13.6	12.8	14.6	12.7	11.6	16.2
1989	9.1	9.6	12.7	13.3	12.4	11.7	15.0
Avg.	10.0	10.0	12.4	12.8	12.8	11.0	13.2

*1985 - 1988 revised by Insurance Services Office because of revisions to the GAAP adjustment procedure.

**Composed largely of companies engaged in property and casualty insurance with or without life insurance and other financial services.

***Median for Fortune 500 U.S. Industrial Corporations.

Sources: Property/casualty insurance data: GAAP accounting, Insurance Services Office; statutory accounting, calculated by Insurance Information Institute from A.M. Best data. Non-insurance industry data for 1980 through 1983 are industry averages; for 1984 through 1989 they are medians. Both the averages and the medians come from Fortune Magazine.

Investments of Property/Casualty Insurers

Investments of property/casualty insurance companies totaled $406.2 billion in 1989, representing 77.1 percent of total assets, which were $527 billion in 1989. Most of these "assets" were committed to expected losses of policyholders.

Fixed income securities continue to dominate the portfolios, comprising nearly 77 percent of total investments in 1989. Special revenue bonds alone accounted for nearly 26 percent of the industry's invested assets. Special revenue bonds include those issued by hospitals and colleges for expansion of facilities as well as those issued for bridges and highways and a variety of public works programs, many of which would not be funded without insurance company investment. Thus, dollars spent to avoid the economic consequences of individual risk are invested to improve the common welfare, an example of the role of insurance in American society.

The makeup of insurers' investment portfolios has been relatively constant over the past decade. The portion of portfolios invested in bonds increased about 3 percent, with investments in each of the other three areas therefore falling slightly.

Funds used for investments are generally derived from three major sources: policyholders' surplus, unearned premium reserves, and loss reserves. The bulk of invested funds are in investments that can be sold readily—stocks and bonds, rather than general real estate—so that cash is readily available to pay claims in the event of a catastrophe.

INVESTMENTS OF PROPERTY/CASUALTY INSURERS

(Percent of total investments)

Investment type	1989	1984	1980
Bonds	76.67	73.38	73.72
U.S. govt.	19.96	18.01	11.06
Other govt.	.88	.79	.87
State, muni., etc.	11.89	12.01	14.75
Special rev., etc.	25.99	30.05	33.73
Railroad	.20	.28	.31
Utility	2.65	3.38	3.50
Misc.	14.94	7.71	9.06
Parent, subs., affiliates	.16	.26	.44
Common Stock	17.98	19.67	20.13
Railroad	.09	.11	.13
Utility	1.47	1.65	1.61
Bank/insurance	1.48	1.47	1.69
Misc.	9.73	10.30	12.08
Parent, subs., affiliates	5.21	6.14	4.63
Preferred Stock	2.70	4.71	4.96
Railroad	.01	.06	.05
Utility	1.01	2.91	3.43
Bank/insurance	.25	.40	.14
Misc.	1.17	1.23	1.29
Parent, subs., affiliates	.27	.11	.05
Other	2.65	2.25	1.19
Mortgages	1.59	1.36	.60
Collateral loans	.06	.05	.06
Misc.	1.00	.84	.53

Note: Sums of individual items may not add up to investment type totals because of rounding.
Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Net Premiums Written, 1980-1989

Total net premiums written by property/casualty companies rose only 3.2 percent in 1989, reaching $208 billion. Overall, during the last decade, total net premiums increased by 118 percent. However, if the dollar value of these premiums is held constant at 1980 levels, total net premiums increased by only 45 percent.

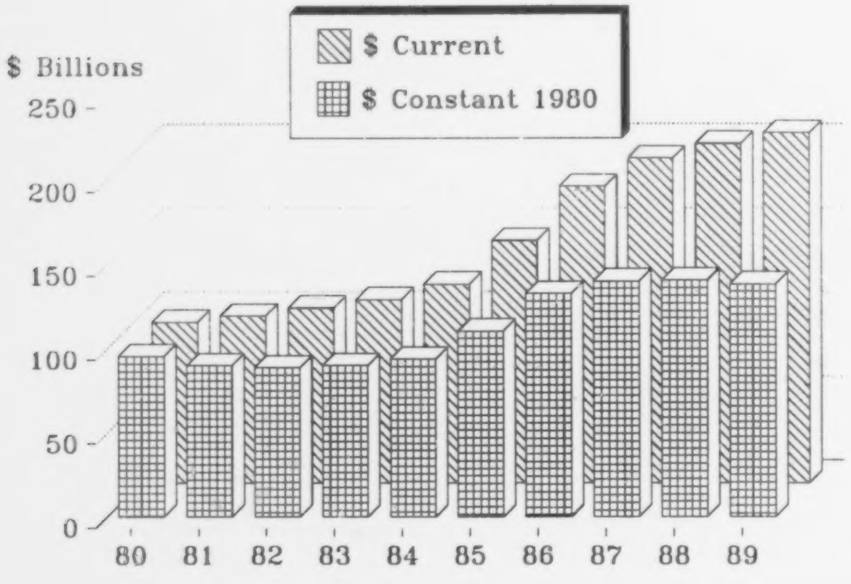
TOTAL NET PREMIUMS WRITTEN BY PROPERTY AND CASUALTY INSURANCE COMPANIES, 1980-1989

($1,000)

Year	Accident and health	All other	Total	Annual % change
1980	$3,290,764	$92,388,785	$95,568,749	+6.0
1981	3,585,113	95,690,462	99,275,575	+3.9
1982	4,306,651	99,661,570	103,968,221	+4.7
1983	4,347,760	104,635,048	108,982,808	+4.8
1984	3,836,695	114,329,616	118,166,311	+8.4
1985	3,205,359	140,981,061	144,186,420	+22.0
1986	2,929,510	173,622,560	176,552,070	+22.4
1987	3,814,711	189,431,068	193,245,779	+9.5
1988	4,699,179	197,315,519	202,014,698	+4.5
1989	4,579,572	203,808,381	208,387,953	+3.2

Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

TOTAL NET PREMIUMS IN CURRENT AND CONSTANT DOLLARS, 1980-1989



Automobile Insurance

Premiums for auto insurance increased 5.2 percent in 1989 compared with 1988. The $90.9 billion of premiums written for auto insurance in 1989 represents about 44 percent of the total $208.4 billion written premiums in the United States last year.

The $90.9 billion breaks down into $73.6 billion (81 percent) for private passenger auto and $17.3 billion (19 percent) for commercial. Liability coverage (personal and commercial) accounted for $56.0 billion (62 percent) of total auto premiums and physical damage accounted for $34.9 billion (38 percent).

Private passenger auto liability had the sharpest increase in premium volume with 7.8 percent over 1988. The smallest increase was in commercial auto physical damage – 1.4 percent.

The profit made in physical damage coverage in 1989 was overwhelmed by the ever-mounting losses in liability coverage. Auto insurance as a whole has not shown an underwriting profit for more than a decade.

PRIVATE PASSENGER AUTOMOBILE INSURANCE, 1980-1989

($1,000)

	Liability			Physical damage		
Year	Premiums written	Annual % change	Combined ratio*	Premiums written	Annual % change	Combined ratio*
1980	$18,590,373	+6.9	102.6	$13,086,150	+9.9	96.6
1981	19,649,912	+5.7	108.9	14,033,870	+7.2	98.6
1982	21,487,468	+9.4	110.1	15,292,070	+9.0	101.4
1983	23,343,939	+8.6	111.0	16,974,304	+11.0	96.3
1984	24,809,382	+6.3	112.8	18,497,769	+9.0	100.6
1985	28,243,882	+13.8	118.9	21,180,583	+14.5	98.9
1986	32,972,920	+16.7	117.9	24,198,891	+14.3	93.6
1987	37,449,134	+13.6	116.1	26,838,193	+10.9	89.7
1988	40,812,744	+9.0	115.9	28,676,435	+6.8	92.0
1989	43,976,575	+7.8	117.0	29,585,442	+3.2	95.5

*Before dividends to policyholders.

Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

COMMERCIAL AUTOMOBILE INSURANCE, 1980-1989

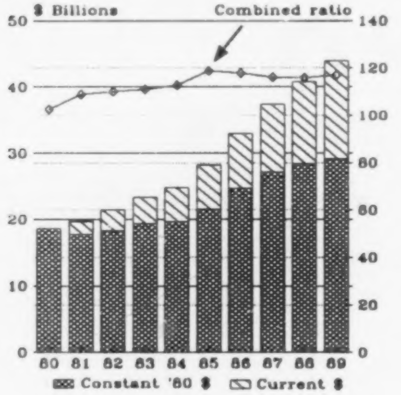
($1,000)

	Liability			Physical damage		
Year	Premiums written	Annual % change	Combined ratio*	Premiums written	Annual % change	Combined ratio*
1980	$4,728,913	+0.3	109.0	$2,746,853	+4.5	95.9
1981	4,745,262	+0.3	117.5	2,713,919	-1.2	99.8
1982	4,738,978	-0.1	125.6	2,713,417	0.0	106.0
1983	4,736,128	-0.1	132.0	2,773,199	+2.2	105.9
1984	5,407,281	+14.2	142.4	3,268,035	+17.8	110.9
1985	7,842,789	+45.0	126.3	4,066,138	+24.4	97.1
1986	11,108,002	+41.6	111.6	5,106,615	+25.6	82.1
1987	11,755,444	+5.8	107.1	5,157,198	+1.0	79.4
1988	11,707,484	-0.4	107.5	5,182,808	+0.5	80.4
1989	12,047,151	+2.9	111.5	5,253,759	+1.4	85.4

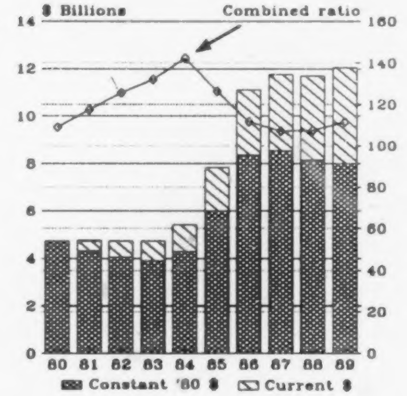
*Before dividends to policyholders.

Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Private Passenger Auto Liability
Written premiums & combined ratios



Commercial Auto Liability
Written premiums & combined ratios



Homeowners Multiple Peril Insurance

Until the mid-1950s, homeowners had to buy a variety of insurance coverages separately in order to obtain full coverage against fire, windstorm, burglary and theft, and to protect themselves against liability claims. While many homeowners purchased fire and extended coverage insurance, many failed to take advantage of other available forms of coverage. To help people more adequately safeguard their resources, insurers developed these "package" policies, which offer adequate coverage against a variety of perils at a cost lower than the combined costs of the separate coverages.

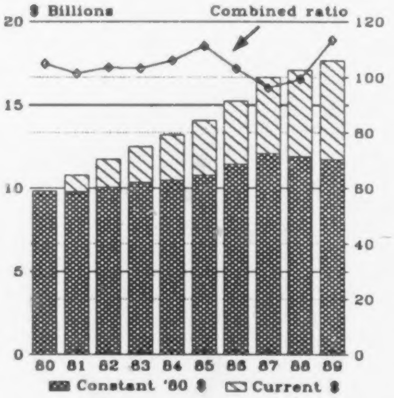
Underwriting results for homeowners multiple peril insurance deteriorated considerably in 1989, going from a combined ratio of 99.4 to 113.4. Losses resulting from the catastrophes of 1989 were responsible for the deterioration.

HOMEOWNERS MULTIPLE PERIL INSURANCE, 1980-1989

Year	Premiums written (*$1,000*)	Annual % change	Combined ratio*
1980	9,820,753	+11.7	104.9
1981	10,779,626	+9.8	101.4
1982	11,746,998	+9.0	103.5
1983	12,511,830	+6.5	103.2
1984	13,212,762	+5.6	106.1
1985	14,066,391	+6.5	111.3
1986	15,222,027	+8.2	103.1
1987	16,653,011	+9.4	96.2
1988	17,093,301	+2.6	99.4
1989	17,670,939	+3.4	113.4

*Before dividends to policyholders.
Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Written premiums & combined ratios



Commercial and Farmowners Multiple Peril Insurance

Underwriting results for both commercial and farmowners multiple peril insurance deteriorated in 1989 because of the castrophes that struck the United States. Commercial multiple peril premium volume dropped slightly (1.1 percent), the first decrease since 1981. Farmowners' premium volume increased 6.6 percent, after a small decrease in 1988, the only decrease in the past decade.

As with homeowners multiple peril coverage, similar packages for commercial and farmowner customers first appeared in the 1950s; they offer adequate coverage against a variety of perils at a cost lower than the combined costs of separate coverages. The success of these policies has had a pronounced effect on the amount of insurance written for fire, liability (other than auto), burglary and theft, inland marine, and glass because these coverages are included in the various multiple peril policies.

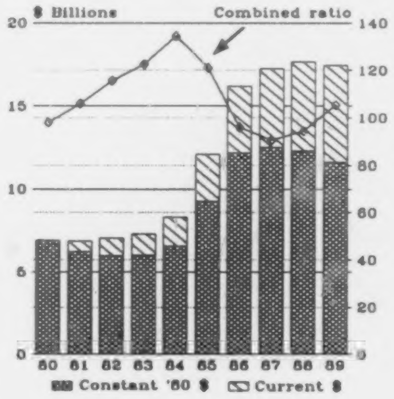
COMMERCIAL MULTIPLE PERIL INSURANCE, 1980-1989

Year	Premiums written (*$1,000*)	Annual % change	Combined ratio*
1980	$6,885,159	+3.3	98.0
1981	6,869,978	-0.2	106.0
1982	7,009,385	+2.0	115.6
1983	7,292,720	+4.0	122.6
1984	8,286,962	+13.6	134.5
1985	12,096,578	+46.0	121.1
1986	16,190,282	+33.8	96.0
1987	17,230,885	+6.4	90.7
1988	17,656,728	+2.5	94.5
1989	17,468,204	-1.1	105.5

*Before dividends to policyholders.

Source: A.M. Best Company, Inc., Best's Aggregates & Averages

Written premiums & combined ratios



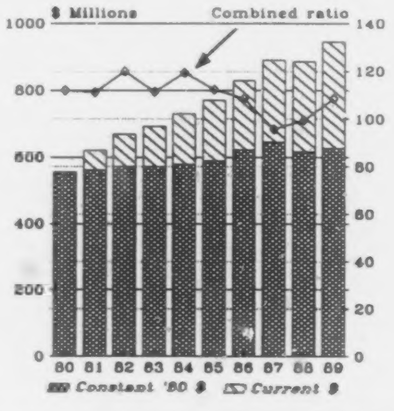
FARMOWNERS MULTIPLE PERIL INSURANCE, 1980-1989

Year	Premiums written (*$1,000*)	Annual % change	Combined ratio*
1980	$554,759	+7.0	112.0
1981	619,889	+11.7	111.2
1982	668,991	+7.9	120.0
1983	691,553	+3.4	111.4
1984	729,153	+5.4	119.4
1985	769,915	+5.6	112.3
1986	828,365	+7.6	108.6
1987	889,752	+7.4	95.7
1988	886,161	-0.4	99.5
1989	944,392	+6.6	108.5

*Before dividends to policyholders.

***Source:** A.M. Best Company, Inc., Best's* Aggregates & Averages.

Written premiums & combined ratios



Crop-Hail Insurance

Premium volume for crop-hail insurance, which protects farmers against damage to their crops from hail and certain other perils, increased to $376.7 million in 1989, up 2.7 percent over 1988.

Private industry wrote an additional $712.9 million in multiple peril crop insurance in 1989, nearly double the $373 million written in 1988.

This increase probably reflects the heightened sensitivity of farmers as a result of crop losses in major agricultural areas beginning in 1988 and continuing into 1989. This "all-risk" coverage is reinsured by the Federal Crop Insurance Corporation, which wrote $90.6 million of this coverage in 1989.

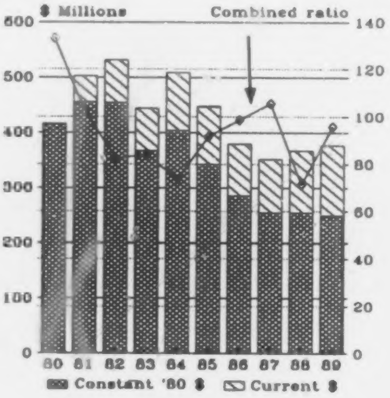
CROP-HAIL INSURANCE, 1980-1989

Year	Premiums written *($1,000)*	Annual % change	Combined ratio*
1980	$415,368	+5.2	133.3
1981	502,503	+21.0	102.1
1982	531,570	+5.8	82.4
1983	443,838	-16.5	83.9
1984	508,744	+14.6	73.6
1985	447,065	-12.1	91.7
1986	379,106	-15.2	98.7
1987	351,226	-7.5	105.6
1988	366,547	+4.4	71.3
1989	376,702	+2.7	95.8

* Combined loss and expense ratios are estimates based on expenses reported by members of the National Crop Insurance Services.

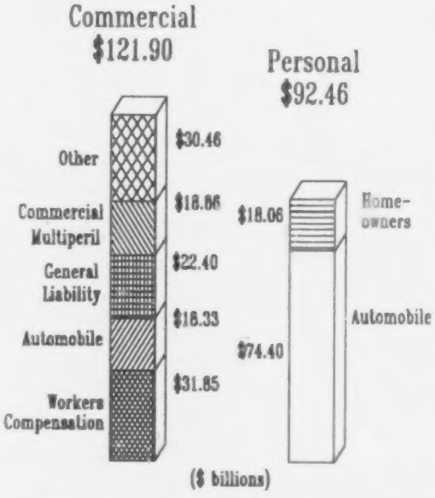
Source: National Crop Insurance Services.

Written premiums & combined ratios



Who Pays the Premium Dollar?

Within the insurance business, distinctions are made between personal and commercial lines of coverage. This chart presents these two classes of insurance as can best be estimated. However, some forms of insurance often purchased by individuals, such as farmowners insurance or coverage on high-value personal property, normally are included in commercial insurance. Thus, these estimates are not precise.



Fire Insurance and Allied Lines

Fire insurance premiums (commercial and non-commercial) dipped only one percent in 1989 compared with the volume in 1988. The combined ratio of 103.6 in 1989, however, was up 11.9 points from the 91.7 combined ratio in 1988.

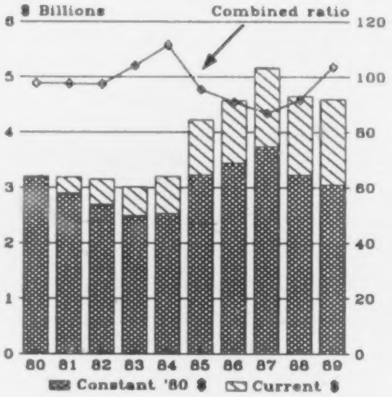
Allied lines premiums showed an increase of 6.4 percent over 1988's volume, but produced a combined ratio of 126.7, an extraordinary increase of points above the ratio in 1988. Allied lines covers damage caused by windstorm, riot, explosion, fire sprinkler leakage, and other perils. One explanation for the leap in the combined ratio in 1989 may be the losses caused by Hurricane Hugo and the high number of destructive storms in the West and Middle West.

FIRE INSURANCE, 1980-1989

Year	Premiums written *($1,000)*	Annual % change	Combined ratio
1980	$3,209,955	-1.1	97.7
1981	3,192,516	-0.5	97.6
1982	3,153,523	-1.2	97.4
1983	3,011,743	-4.5	104.1
1984	3,198,402	+6.2	111.5
1985	4,218,247	+31.9	95.4
1986	4,574,210	+8.4	90.9
1987	5,157,915	+12.8	86.8
1988	4,639,793	-10.0	91.7
1989	4,593,093	-1.0	103.6

*Before dividends to policyholders.
Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Written premiums & combined ratios

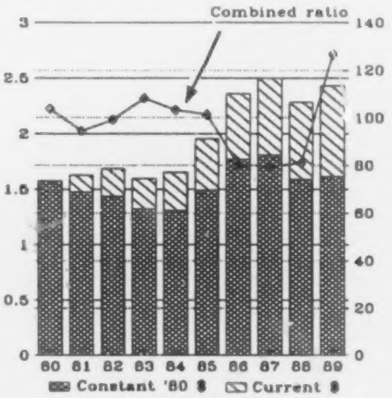


ALLIED LINES INSURANCE, 1980-1989

Year	Premiums written *($1,000)*	Annual % change	Combined ratio
1980	$1,573,940	+2.6	103.8
1981	1,624,487	+3.2	94.6
1982	1,682,885	+3.6	99.2
1983	1,596,561	-5.1	108.3
1984	1,654,243	+3.6	103.3
1985	1,955,122	+18.2	101.4
1986	2,359,011	+20.7	80.4
1987	2,498,491	+5.9	79.6
1988	2,285,143	-8.5	80.9
1989	2,432,029	+6.4	126.7

*Before dividends to policyholders.
Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Written premiums & combined ratios



General Liability Insurance

Premium volumes in general liability declined for the second year in a row, although at a smaller rate than the drop in 1988. Medical malpractice volume increased by 6.2 percent.

General liability insurance provides protection against claims arising from injuries to others or damage to property of others, for which the insured is held responsible because of ownership of the property doing the damage or on which the damage occurred, the sale or distribution of faulty or dangerous products, the operation of equipment, or failure to provide an acceptable level of professional services. The general liability line does not include injuries or damages in automobile accidents.

Although liability coverage is included in both commercial and homeowners "package" policies, the premium volume for the general liability line alone rose steadily until 1980. For the next three years, premium volume dropped. Mounting losses and disastrously bad underwriting results for 1983-85 touched off sharp increases in premium rate levels and premium volume between 1984 and 1987.

Medical malpractice insurance premiums were included in the general liability totals through 1974, but have been reported separately since that time. A proliferation of insurance claims and lawsuits against hospitals, doctors, and other medical practitioners has generated a heavy demand for medical malpractice insurance and contributed to severe underwriting losses in recent years. The picture was better in 1989, as shown by a substantial improvement in the combined ratio, as reflected on the next page.

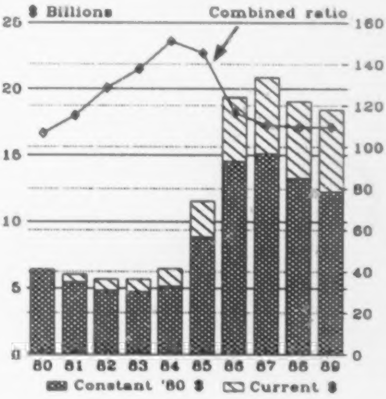
GENERAL LIABILITY INSURANCE, 1980-1989

Year	Premiums written *($1,000)*	Annual % change	Combined ratio*
1980	$6,414,678	-3.0	106.6
1981	6,046,292	-5.7	115.3
1982	5,668,459	-6.2	128.6
1983	5,679,295	+0.2	137.6
1984	6,479,268	+14.1	151.1
1985	11,544,152	+78.2	145.3
1986	19,364,658	+67.7	116.5
1987	20,873,777	+7.8	110.7
1988	19,077,182	-8.6	109.6
1989	18,434,466	-3.4	109.6

*Before dividends to policyholders.

Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Written premiums & combined ratios



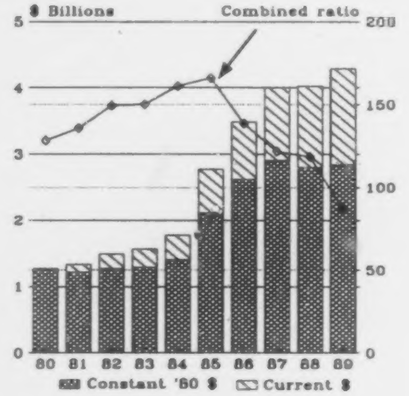
MEDICAL MALPRACTICE INSURANCE, 1980-1989

Year	Premiums written ($1,000)	Annual % change	Combined ratio*
1980	1,275,603	+5.9	128.2
1981	1,338,299	+4.9	135.7
1982	1,490,270	+11.4	149.3
1983	1,568,001	+5.2	150.1
1984	1,774,754	+13.2	161.1
1985	2,769,230	+56.0	166.0
1986	3,491,905	+26.1	138.6
1987	4,004,185	+14.7	121.7
1988	4,027,825	+0.6	118.5
1989	4,278,009	+6.2	86.7

*Before dividends to policyholders.

Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Written premiums & combined ratios



Workers' Compensation Insurance

Workers' compensation insurance provides for medical care, rehabilitation, and lost wages for employees injured on the job, and death benefits for dependents of persons killed in work-related accidents. About nine out of 10 people in the nation's work force have this protection, which is compulsory in all but three states—New Jersey, South Carolina, and Texas. Even in those states, most businesses provide the coverage.

Escalating costs for this insurance (caused by many factors, including increased litigation and medical costs rising considerably more rapidly than workers' wages, a principal determinant of premium levels) prompted providers and purchasers of it to examine their programs to determine how the system can be made to work more efficiently. In 1989, workers' compensation accounted for about 13 percent of the property/casualty insurance industry's premiums, but 25 percent of its underwriting losses.

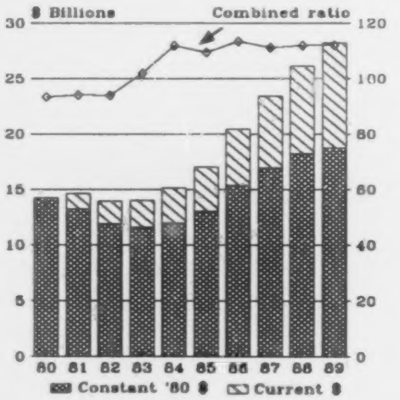
WORKERS' COMPENSATION INSURANCE, 1980-1989

Year	Premiums written ($1,000)	Annual % change	Combined ratio*
1980	$14,238,247	+8.2	93.4
1981	14,616,297	+2.7	94.1
1982	13,945,256	-4.6	94.0
1983	14,005,293	+0.4	101.9
1984	15,107,292	+7.9	112.0
1985	17,047,548	+12.8	109.5
1986	20,431,215	+19.8	113.5
1987	23,428,978	+14.7	111.2
1988	26,135,309	+11.6	112.0
1989	28,241,380	+8.1	112.1

*Before dividends to policyholders.

Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Written premiums & combined ratios



Surety and Fidelity

Surety bonds, including contract, license and permit, court, and fiduciary bonds, showed an underwriting profit in 1989 for the second year in a row, following three years of losses.

Surety bonds provide monetary compensation in the event the insured fails to perform certain acts—such as the proper fulfillment of a construction contract—within a stated period. Surety bonds are usually purchased by the person or company who has contracted to perform the insured act.

The sharp decline in surety premiums in 1986 was partly because of the separation of the surety and financial guaranty lines in that year.

Fidelity bonds, which are usually purchased by an employer, protect against losses caused by employee fraud or dishonesty.

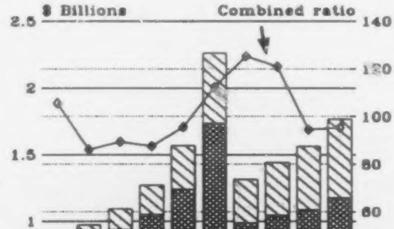
SURETY AND FIDELITY BONDS, 1980-1989

	Surety			**Fidelity**		
Year	**Premiums written (*$1,000*)**	**Annual % change**	**Combined ratio***	**Premiums written (*$1,000*)**	**Annual % change**	**Combined ratio***
1980	$887,577	+10.2	105.7	$360,063	+2.9	93.2
1981	970,498	+9.3	86.1	380,749	+5.7	98.9
1982	1,094,117	+12.7	89.4	360,041	-5.4	113.5
1983	1,272,198	+16.3	87.5	376,651	+4.6	122.3
1984	1,564,934	+23.0	95.6	431,719	+14.6	118.4
1985	2,264,435	+44.7	112.5	588,245	+36.3	94.9
1986	1,315,263	-41.9	125.4	801,012	+36.2	75.8
1987	1,441,620	+9.6	121.0	1,008,608	+25.9	71.4
1988	1,563,208	+8.4	94.5	979,544	-2.9	72.4
1989	1,769,421	+13.2	95.4	928,081	-5.3	69.5

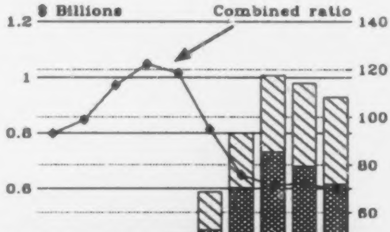
*Before dividends to policyholders.

Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Surety bonds
Written premiums & combined ratios



Fidelity bonds
Written premiums & combined ratios



Burglary and Theft Insurance

Premium volume in the burglary lines fell in 1989 for the second year, although to a lesser extent than in 1988.

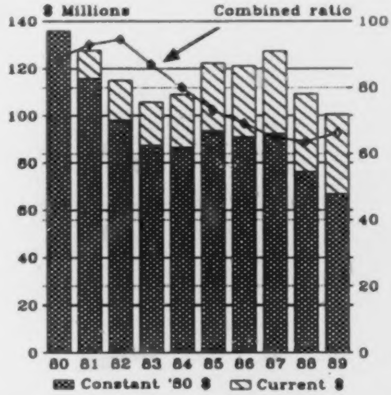
The burglary lines include coverages for loss of property (including money and securities) due to burglary, robbery, and larceny, and loss of money and securities due to destruction or disappearance.

BURGLARY AND THEFT, 1980-1989

Year	Premiums written (*$1,000*)	Annual % change	Combined ratio*
1980	$135,727	-3.1	88.8
1981	127,534	-6.0	92.9
1982	114,905	-9.9	94.5
1983	105,825	-7.9	87.0
1984	109,005	+3.0	80.0
1985	122,259	+12.2	73.1
1986	121,055	-1.0	69.1
1987	127,422	+5.3	64.8
1988	109,409	-14.1	63.7
1989	100,583	-8.1	66.1

*Before dividends to policyholders.
Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Written premiums & combined ratios



Boiler and Machinery Insurance

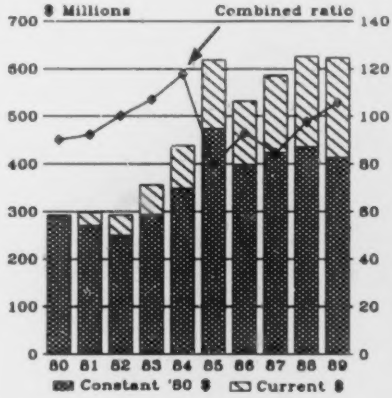
Boiler and machinery premium volume decreased slightly in 1989. This specialized line covers a wide variety of power-producing equipment. The increased size and sophistication of this equipment have heightened the need for loss-prevention services, which insurance companies provide.

BOILER AND MACHINERY, 1980-1989

Year	Premiums written (*$1,000*)	Annual % change	Combined ratio*
1980	292,624	+3.5	90.2
1981	298,320	+1.9	92.4
1982	292,845	-1.8	100.3
1983	355,861	+21.5	107.1
1984	439,108	+23.4	117.8
1985	618,358	+40.8	79.8
1986	531,319	-14.1	93.0
1987	595,545	+12.1	84.6
1988	626,071	+5.1	97.7
1989	623,107	-0.5	105.7

*Before dividends to policyholders.
Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Written premiums & combined ratios



Glass Insurance

Premium volume for glass insurance declined more than 16 percent in 1989. Architectural demands, merchandising trends, and decorative constructional functions have contributed to increasing use of glass, but much of this peril is insured through the popular multiple peril package policies.

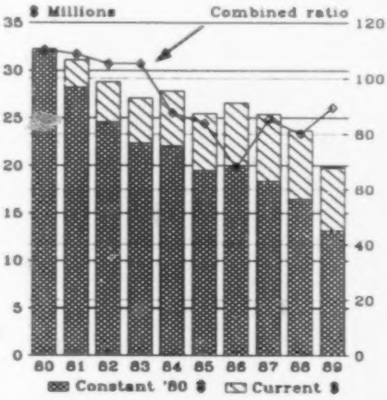
GLASS, 1980-1989

Year	Premiums written (*$1,000*)	Annual % change	Combined ratio*
1980	32,248	-3.6	110.3
1981	31,085	-3.6	108.8
1982	28,814	-7.3	105.2
1983	27,092	-6.0	105.3
1984	27,842	+2.8	87.6
1985	25,492	-8.4	83.9
1986	26,608	+4.4	68.0
1987	25,389	-4.6	85.2
1988	23,681	-6.7	80.1
1989	19,830	-16.3	89.5

*Before dividends to policyholders.

Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Written premiums & combined ratios



Inland Marine Insurance

Inland marine premium volume continues to increase each year, despite the diversion of personal property coverages to homeowners and other package forms.

Originally developed to cover goods in transit by other than ocean vessels, inland marine insurance today covers bridges and tunnels as well as personal effects, personal property, jewelry, furs, fine arts, and many other properties.

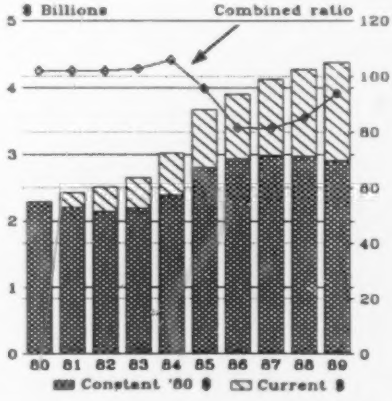
INLAND MARINE, 1980-1989

Year	Premiums written (*$1,000*)	Annual % change	Combined ratio*
1980	2,291,294	+11.2	102.1
1981	2,427,692	+6.0	102.1
1982	2,509,999	+3.4	102.1
1983	2,649,461	+5.6	102.8
1984	3,017,099	+13.9	106.0
1985	3,672,227	+21.7	95.8
1986	3,898,591	+6.2	81.6
1987	4,119,936	+5.7	81.2
1988	4,270,747	+3.7	85.0
1989	4,378,462	+2.5	93.9

*Before dividends to policyholders.

Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Written premiums & combined ratios



Ocean Marine Insurance

Ocean marine insurance premium volume declined for the second year in a row, by 4.5 percent. Despite greater international trade and the increase of pleasure craft on coastal and inland waterways, the U.S. ocean marine hull and cargo market has expanded modestly over the last decade.

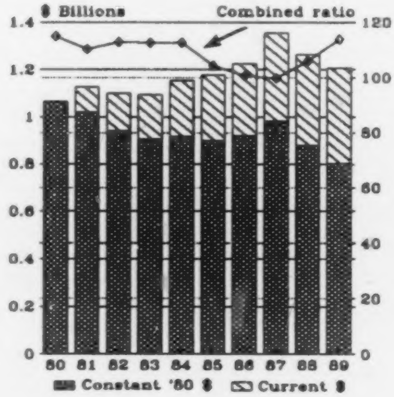
OCEAN MARINE, 1980-1989

Year	Premiums written ($1,000)	Annual % change	Combined ratio*
1980	1,064,798	+5.5	115.0
1981	1,126,766	+5.8	110.3
1982	1,100,596	-2.3	112.9
1983	1,096,231	-0.4	112.6
1984	1,155,131	+5.4	112.7
1985	1,176,528	+1.9	104.4
1986	1,224,729	+4.1	100.6
1987	1,354,533	+10.6	99.8
1988	1,262,859	-6.8	106.0
1989	1,206,483	-4.5	113.9

*Before dividends to policyholders.

Source: A.M. Best Company, Inc., Best's Aggregates & Averages.

Written premiums & combined ratios



Nuclear Insurance

Insurance against losses resulting from nuclear accidents is provided by the American Nuclear Insurers, the Mutual Atomic Energy Liability Underwriters, and individual members of the MAERP Reinsurance Association.

Together the nuclear pools make available to any nuclear facility:

- Up to $200 million of liability coverage (bodily injury and property damage) and $30 million of contingent liability. These coverages protect the general public.
- Up to $500 million of insurance to cover damage to the property of nuclear facility operators.
- Excess property insurance of $560 million.

Under the pools' Industry Credit Rating Plan, approximately 70 percent of each year's liability premium income is reserved for potential claims or for return to insureds based upon loss experience over a 10-year period. In 1989, almost $9.08 million was returned to those insureds having policies in effect in 1979. This brings the total amount refunded since 1967 to just under $61.7 million.

The pools also have a program of rate modification for property coverage. Under this program, the Nuclear Property Insurance Industry Experience Rating Guide, a rating modification factor is established each year based on an evaluation of the pools' loss experience during the preceding 20-year period. In 1989, the factor was -26.1 percent.

NUCLEAR INSURANCE PREMIUMS, 1957-1989*

Year	Liability premium	Annual % change	Property premium	Annual % change
1957-1978	$127,045,309*		$202,091,776*	
1979	21,022,351		40,199,176	
1980	23,649,412	+11.1	61,353,439	+52.6
1981	28,263,623	+16.3	74,263,992	+20.0
1982	30,874,994	+8.5	98,826,043	+33.1
1983	33,171,776	+6.9	111,680,839	+13.0
1984	35,802,008	+7.4	131,798,114	+18.0
1985	40,772,999	+12.2	143,880,947	+9.2
1986	58,072,433	+42.4	140,882,556	-2.1
1987	61,562,970	+5.7	160,906,144	+14.2
1988	76,212,271	+19.2	173,526,209	+7.3
1989	74,607,157	-2.2	158,746,775	-8.5

* Gross written premiums.

Source: American Nuclear Insurers.

Direct Written Premiums by State

Direct premiums written by property/casualty insurance companies in 1989 totaled more than $214 billion, an increase of 4.2 percent over 1988. Data provided by A.M. Best Company (representing about 98 percent of the nation's total insurance market) are the basis for the tabulations that follow of premiums by state and by line.

The totals differ slightly from the premium totals shown elsewhere in *Insurance Facts* because the tabulations presented here are based on direct premiums written and those used elsewhere are based on net premiums written. Direct written premiums are the amounts actually paid by the policyholders. Net written premiums reflect additional exchanges of premiums among insurance companies which contract, through a process known as reinsurance, to absorb specified portions of each other's losses.

DIRECT WRITTEN PREMIUMS BY STATE, 1989

($1,000)

State	All lines total	State	All lines total
Alabama	$2,798,698	Georgia	$5,552,353
Alaska	621,627	Hawaii	1,106,888
Arizona	2,784,344	Idaho	651,718
Arkansas	1,622,588	Illinois	10,110,632
California	31,757,885	Indiana	3,838,192
Colorado	2,669,257	Iowa	2,071,934
Connecticut	4,516,97[illegible]	Kansas	1,891,547
Delaware	721,707	Kentucky	2,354,107
District of Columbia	772,368	Louisiana	3,225,831
Florida	11,249,671	Maine	1,196,261

(Table continues)

State	All lines total	State	All lines total
Maryland	$4,403,009	Oklahoma	$2,162,808
Massachusetts	7,115,463	Oregon	2,331,045
Michigan	7,862,334	Pennsylvania	11,273,101
Minnesota	3,845,614	Rhode Island	1,080,383
Mississippi	1,665,475	South Carolina	2,335,004
Missouri	4,049,810	South Dakota	498,152
Montana	562,718	Tennessee	3,520,793
Nebraska	1,211,906	Texas	14,378,542
Nevada	924,285	Utah	881,614
New Hampshire	1,203,969	Vermont	539,494
New Jersey	9,239,795	Virginia	4,673,121
New Mexico	1,013,076	Washington	3,284,425
New York	17,642,616	West Virginia	1,001,250
North Carolina	4,387,759	Wisconsin	3,708,219
North Dakota	468,212	Wyoming	284,282
Ohio	6,998,761	**Total**	**$216,061,412**

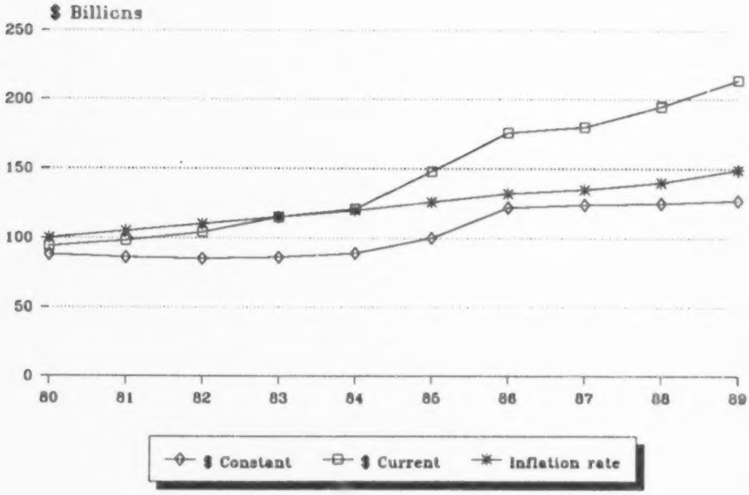
Source: A.M. Best Company, Inc., Best's Executive Data Service.

While there has been constant growth in the amount of direct premiums written over the last decade, that growth has not kept up with the rate of inflation. If adjustments are made for inflation, premium growth appears so slow as to suggest that insurance costs have generally declined in relation to costs of other goods and services.

That adjustment also illustrates the insurance market cycle. In the graph below, when the constant dollar line moves away from the inflation rate line, the market is softening; when it moves toward the inflation rate line, the market is hardening.

DIRECT PREMIUMS WRITTEN, 1980-1989, IN CURRENT AND CONSTANT 1980 DOLLARS

($1 billion)



DIRECT WRITTEN PREMIUMS BY LINE, 1989

($1,000)

	Pvt. passenger auto		Commercial auto			
State	**Liability**	**Phys. dmg.**	**Liability**	**Phys. dmg.**	**Home-owners**	**Farm-owners**
Alabama	$411,875	$491,327	$163,372	$87,234	$295,422	$25,762
Alaska	80,321	60,293	24,753	8,399	35,614	119
Arizona	762,811	387,397	161,725	68,105	237,710	6,070
Arkansas	306,520	241,206	122,821	48,969	164,108	6,947
California	7,750,411	3,917,577	1,581,395	699,823	2,236,205	78,075
Colorado	654,001	418,643	132,589	67,425	265,012	17,860
Connecticut	942,448	533,168	246,401	100,524	358,282	2,213
Delaware	161,610	87,540	51,191	20,755	47,831	2,055
Dist. of Col.	90,580	66,375	28,036	5,799	42,282	14
Florida	2,949,315	1,437,386	705,800	282,224	936,941	6,924
Georgia	1,255,802	851,543	367,835	147,267	450,678	27,901
Hawaii	263,243	121,180	65,982	21,774	54,680	37
Idaho	128,457	98,244	38,638	21,820	50,646	16,852
Illinois	1,602,073	1,415,275	488,590	259,348	735,831	60,768
Indiana	753,988	615,408	249,536	144,964	371,159	56,885
Iowa	304,446	274,144	122,792	70,877	138,913	27,699
Kansas	315,506	284,217	102,230	64,995	185,316	39,160
Kentucky	482,035	355,221	127,505	74,036	196,115	50,349
Louisiana	674,883	382,897	247,088	69,176	343,295	2,718
Maine	177,367	154,417	73,022	38,762	98,100	1,707
Maryland	1,266,737	629,290	310,314	109,578	308,830	9,179
Massachusetts	1,439,218	1,021,932	456,333	201,644	664,830	1,069
Michigan	1,399,348	1,617,510	307,438	245,329	701,165	53,793
Minnesota	780,487	454,336	192,268	89,078	329,565	23,362
Mississippi	264,656	243,913	121,063	55,138	190,708	1,598
Missouri	719,196	618,363	225,755	110,203	357,626	43,071
Montana	104,493	75,968	42,673	23,957	46,968	15,097
Nebraska	180,778	165,327	80,083	45,426	92,895	26,701
Nevada	286,612	144,573	53,011	21,819	82,194	2,278
New Hampshire	213,073	195,279	74,633	36,567	109,562	500
New Jersey	2,178,570	1,163,004	806,582	246,186	712,708	1,433
New Mexico	221,831	158,639	52,949	27,912	88,797	5,558
New York	3,175,909	2,271,129	1,079,564	351,364	1,468,944	18,740
North Carolina	1,061,868	652,916	332,183	131,771	410,401	19,438
North Dakota	71,948	65,212	26,468	16,388	31,288	18,753
Ohio	1,572,323	1,214,206	433,340	236,205	646,020	42,046
Oklahoma	418,184	362,404	127,038	66,577	286,702	40,281
Oregon	526,428	310,195	133,519	71,227	158,652	19,241
Pennsylvania	2,846,767	1,359,767	677,876	292,696	799,982	30,646
Rhode Island	200,902	156,845	61,306	23,566	102,535	19
South Carolina	534,227	382,231	148,916	57,355	235,347	2,321
South Dakota	73,561	69,427	32,953	19,496	28,531	15,598
Tennessee	608,186	603,971	228,432	111,914	336,704	37,553
Texas	2,481,257	1,885,782	792,980	241,482	1,455,178	42,364
Utah	202,016	166,097	54,941	23,994	79,176	2,746
Vermont	81,393	81,205	33,121	18,848	57,515	6,920
Virginia	1,124,759	687,901	322,633	108,622	353,206	14,780
Washington	873,036	494,397	187,019	108,959	304,264	21,416
West Virginia	267,373	196,111	66,514	35,072	103,759	4,252
Wisconsin	632,459	477,563	202,228	109,476	248,368	52,115
Wyoming	48,136	55,379	17,020	11,498	31,167	6,127
Totals	**$45,923,420**	**$30,174,327**	**$12,782,451**	**$5,551,627**	**$18,067,726**	**$1,009,110**

Source: A.M. Best Company, Inc., Best's Executive Data Service.

DIRECT WRITTEN PREMIUMS BY LINE, 1989

($1,000)

State	Comm. multiperil	Workers' compensation	Med. mal-practice	Other liability	Fire	Allied lines
Alabama	$226,671	$409,233	$78,769	$238,093	$71,855	$32,098
Alaska	63,653	179,250	18,583	58,659	12,322	2,253
Arizona	250,290	247,798*	113,203	283,104	27,726	29,385
Arkansas	117,280	223,197	26,911	136,340	54,249	40,737
California	2,946,208	6,069,956*	709,075	2,806,183	390,516	216,832
Colorado	248,850	310,864*	27,708	250,182	22,256	38,035
Connecticut	412,630	859,751	114,986	587,267	60,800	34,023
Delaware	51,211	110,790	19,435	86,618	9,393	6,151
Dist. of Col.	75,798	144,394	35,489	122,620	10,950	4,861
Florida	983,087	1,558,042	135,798	890,133	133,428	236,699
Georgia	395,121	866,476	162,066	438,993	96,402	60,262
Hawaii	88,094	240,258	18,844	130,767	14,057	11,813
Idaho	63,626	89,562*	16,008	49,984	9,444	20,544
Illinois	870,364	1,819,772	290,055	1,320,325	133,892	162,239
Indiana	371,366	446,060	34,816	376,617	62,809	51,512
Iowa	148,936	302,516	57,914	228,948	42,381	177,579
Kansas	143,196	264,446	34,086	165,510	33,681	75,817
Kentucky	183,723	341,378	65,387	196,934	48,630	26,885
Louisiana	220,655	456,562	53,563	288,915	84,984	99,534
Maine	118,822	319,406	34,234	82,575	19,655	7,711
Maryland	361,972	520,025*	119,757	392,329	46,496	26,360
Massachusetts	628,934	1,298,936	26,829	758,215	112,550	50,331
Michigan	665,092	910,213*	175,174	1,166,801	99,173	49,872
Minnesota	313,371	643,231*	78,279	406,379	43,377	128,851
Mississippi	105,894	248,738	22,341	119,443	71,098	51,225
Missouri	342,197	533,311	118,489	418,849	66,367	65,921
Montana	60,985	48,109*	19,518	41,591	8,958	36,974
Nebraska	97,852	148,432	21,114	105,631	27,687	105,220
Nevada	111,730	6,701*	27,359	85,306	14,449	7,203
New Hampshire	124,523	229,318	11,324	108,339	17,337	8,084
New Jersey	949,839	1,043,309	259,017	1,100,686	108,462	76,836
New Mexico	80,376	192,358	5,784	77,684	13,832	13,585
New York	2,161,781	1,374,166*	884,561	2,613,760	276,272	98,389
North Carolina	320,158	508,401	99,175	349,092	89,125	83,273
North Dakota	37,912	2,567*	15,655	33,502	9,427	92,628
Ohio	716,662	42,745*	251,729	826,529	123,800	65,367
Oklahoma	170,912	234,961*	13,167	170,879	50,648	4[illegible],081
Oregon	210,374	423,222*	61,354	190,791	37,391	20,612
Pennsylvania	944,398	2,030,890*	245,631	1,188,967	156,245	67,423
Rhode Island	95,215	217,038	4,054	110,392	17,173	9,071
South Carolina	168,851	352,325	9,076	153,467	67,943	43,763
South Dakota	40,099	67,455	11,836	36,759	8,712	46,045
Tennessee	268,970	543,766	87,190	299,051	81,735	29,705
Texas	637,206	3,418,425	172,589	1,431,117	309,177	330,717
Utah	88,144	48,203*	24,318	83,604	8,911	6,619
Vermont	66,624	83,593	12,802	52,212	11,013	5,058
Virginia	379,554	614,291	106,235	481,907	72,967	42,487
Washington	327,265	51,832*	107,069	348,737	52,884	40,044
West Virginia	80,810	3,647*	35,878	91,171	28,641	11,163
Wisconsin	286,736	748,949	58,655	397,201	51,722	50,744
Wyoming	39,741	4,268*	9,235	23,652	5,924	6,199
Totals	**$18,863,755**	**$31,853,137***	**$5,142,126**	**$22,395,815**	**$3,428,925**	**$3,051,816**

* Does not include premiums written by state workers' compensation funds.

Source: A.M. Best Company, Inc., Best's Executive Data Service.

DIRECT WRITTEN PREMIUMS BY LINE, 1989

($1,000)

State	Inland marine	Ocean marine	Surety	Fidelity	Burglary & theft	Boiler & machinery
Alabama	$80,022	$10,834	$25,645	$12,908	$1,453	$9,238
Alaska	17,208	8,089	10,696	2,003	107	2,595
Arizona	49,986	3,895	45,686	5,403	721	5,272
Arkansas	48,071	2,395	12,959	7,338	666	5,135
California	701,505	115,255	310,470	109,107	9,164	49,763
Colorado	58,894	2,008	33,699	11,757	1,144	7,300
Connecticut	96,209	22,211	25,130	26,696	3,212	11,665
Delaware	20,810	3,123	4,651	3,559	464	1,976
Dist. of Col.	21,202	2,303	26,097	15,144	1,026	3,746
Florida	325,581	67,879	136,826	37,707	5,053	20,229
Georgia	146,499	14,836	46,953	22,012	2,885	12,464
Hawaii	15,820	4,335	17,754	5,913	354	2,045
Idaho	14,864	1,393	7,623	2,108	147	2,603
Illinois	287,133	35,544	105,249	65,695	7,155	32,224
Indiana	80,389	4,465	30,495	16,828	1,159	13,467
Iowa	47,776	1,549	14,858	10,669	985	7,420
Kansas	47,395	1,418	16,645	9,580	838	5,993
Kentucky	61,433	6,585	28,237	10,719	1,084	8,020
Louisiana	81,050	51,243	27,732	10,757	1,318	12,868
Maine	23,173	10,829	5,568	3,286	347	4,581
Maryland	91,819	18,576	46,455	19,069	2,345	10,049
Massachusetts	157,718	44,927	54,138	35,576	3,333	19,141
Michigan	153,127	20,783	39,823	32,272	2,847	17,168
Minnesota	97,692	11,824	31,271	22,848	2,375	11,727
Mississippi	66,821	3,633	16,107	7,371	1,108	5,075
Missouri	109,837	28,257	33,045	21,083	2,272	10,751
Montana	11,472	188	6,407	2,725	203	1,452
Nebraska	32,844	672	12,372	6,900	651	3,462
Nevada	24,404	728	18,517	3,640	585	2,687
New Hampshire	23,501	5,395	13,724	4,376	361	4,068
New Jersey	209,336	38,560	81,393	41,478	4,633	25,347
New Mexico	23,375	445	12,500	3,759	323	2,939
New York	470,479	384,589	162,295	173,393	14,540	46,683
North Carolina	106,416	12,320	37,442	19,321	2,789	13,266
North Dakota	11,552	104	5,869	3,371	253	2,473
Ohio	182,858	18,678	56,515	36,535	6,747	28,297
Oklahoma	58,074	3,023	21,189	10,818	1,085	5,811
Oregon	48,762	13,155	29,170	6,819	942	8,108
Pennsylvania	208,854	37,271	80,175	53,691	4,489	33,725
Rhode Island	29,700	8,746	10,245	4,920	475	2,970
South Carolina	64,330	5,719	19,712	6,930	914	6,888
South Dakota	11,204	63	4,772	2,497	268	1,330
Tennessee	87,759	14,289	34,303	14,881	1,693	9,824
Texas	350,999	119,292	138,416	52,513	5,331	35,073
Utah	21,274	854	13,471	5,454	375	2,410
Vermont	11,029	1,790	2,700	2,292	210	1,502
Virginia	99,985	18,347	52,338	23,933	3,468	12,611
Washington	102,334	59,946	52,057	15,287	1,415	11,964
West Virginia	21,735	2,033	11,904	5,654	441	4,094
Wisconsin	77,325	6,747	24,910	16,272	3,126	15,066
Wyoming	7,547	131	5,865	1,497	113	1,481
Totals	**$5,199,183**	**$1,251,276**	**$2,062,069**	**$1,046,365**	**$108,992**	**$576,045**

Source: A.M. Best Company, Inc., Best's Executive Data Service.

DIRECT WRITTEN PREMIUMS BY LINE, 1989

($1,000)

State	Glass	Aircraft	Earthquake	Credit	Accident & health	Miscellaneous
Alabama	$194	$6,099	$529	$4,374	$70,655	$39,431
Alaska	2	16,971	2,380	2,341	2,697	8,166
Arizona	109	14,080	1,003	813	32,871	33,690
Arkansas	130	6,649	1,754	516	27,965	18,855
California	3,236	83,366	365,084	24,056	281,978	262,345
Colorado	125	9,982	751	1,916	50,867	30,207
Connecticut	248	19,611	931	2,212	19,593	35,911
Delaware	44	2,992	162	2,112	14,019	9,350
Dist. of Col.	24	11,554	258	54	48,841	9,758
Florida	1,506	39,804	1,746	6,113	166,522	142,649
Georgia	191	23,980	1,028	8,277	77,750	72,722
Hawaii	110	5,147	413	1,002	11,132	10,425
Idaho	34	3,831	277	775	8,067	6,096
Illinois	2,099	33,047	5,004	8,752	239,808	114,580
Indiana	243	9,247	3,070	2,435	96,776	36,178
Iowa	368	4,951	483	992	65,335	16,377
Kansas	295	12,253	520	1,492	62,810	19,835
Kentucky	202	4,590	5,005	646	34,186	41,729
Louisiana	151	14,866	629	1,468	43,376	48,303
Maine	43	2,410	228	336	6,441	12,351
Maryland	213	7,464	519	7,477	38,115	56,329
Massachusetts	1,125	9,200	2,185	10,195	37,129	62,181
Michigan	454	23,346	1,173	2,300	102,544	61,703
Minnesota	257	16,940	406	2,481	121,842	36,596
Mississippi	93	4,508	1,273	3,333	35,166	23,501
Missouri	203	18,535	11,138	4,372	137,495	46,010
Montana	19	2,395	273	159	7,455	4,050
Nebraska	190	4,260	199	518	39,894	10,242
Nevada	55	5,262	894	438	13,729	9,261
New Hampshire	35	3,903	341	1,275	7,022	10,464
New Jersey	965	21,260	1,169	8,908	53,119	91,839
New Mexico	48	4,448	444	613	12,354	10,500
New York	1,673	43,478	2,654	25,253	277,251	118,279
North Carolina	317	10,800	633	11,153	52,966	59,128
North Dakota	34	2,278	42	9	15,589	3,181
Ohio	718	26,313	3,416	5,798	352,060	89,765
Oklahoma	179	10,277	599	957	31,259	22,782
Oregon	121	9,403	1,290	2,493	23,154	22,517
Pennsylvania	602	23,033	1,598	10,711	84,787	91,517
Rhode Island	60	3,632	255	946	7,960	10,138
South Carolina	134	6,277	3,455	1,269	30,807	29,220
South Dakota	52	1,632	72	102	20,096	1,883
Tennessee	230	9,191	6,750	3,061	54,112	41,249
Texas	1,496	56,986	1,234	6,561	214,984	155,106
Utah	40	5,374	1,474	702	29,864	9,850
Vermont	26	1,047	145	196	4,252	3,646
Virginia	391	9,504	770	2,707	58,596	74,564
Washington	375	19,064	6,275	1,278	33,105	50,338
West Virginia	158	2,051	220	844	13,125	10,684
Wisconsin	480	9,834	365	2,223	191,281	47,232
Wyoming	11	1,602	233	113	5,939	1,787
Totals	**$20,108**	**$698,726**	**$442,755**	**$189,128**	**$3,468,740**	**$2,234,500**

Source: A. M. Best Company, Inc., Best's Executive Data Service.

Premium Taxes

Insurance companies - including life, health and property/casualty companies - paid $7.34 billion in premium taxes to the 50 states and the District of Columbia in 1989, an increase of more than 14 percent over 1988. Approximately 47 percent of this amount was paid by property/casualty companies. Premium taxes are taxes on gross premiums or adjusted gross premiums. They are an additional form of taxation on policyholders. Additional payments are made to states for licenses and fees, property taxes, sales and use taxes, unemployment compensation taxes, and in a few states, income and franchise taxes. Premium taxes accounted for about 2.6 percent of all taxes collected by the states during 1989.

PREMIUM TAXES BY STATE, 1989

($1,000)

State	Premium taxes	State	Premium taxes
Alabama	$139,421	Montana	$29,102
Alaska	19,391	Nebraska	42,103
Arizona	90,599	Nevada	45,065
Arkansas	60,100	New Hampshire	35,484
California	1,314,750	New Jersey	233,040
Colorado	84,704	New Mexico	40,808
Connecticut	175,898	New York	582,240
Delaware	34,601	North Carolina	187,502
Dist. of Columbia	30,202	North Dakota	14,433
Florida	250,144	Ohio	252,271
Georgia	157,074	Oklahoma	142,604
Hawaii	35,093	Oregon	55,904
Idaho	35,508	Pennsylvania	335,229
Illinois	265,057	Rhode Island	32,709
Indiana	103,436	South Carolina	94,351
Iowa	84,878	South Dakota	23,817
Kansas	69,402	Tennessee	124,311
Kentucky	151,199	Texas	441,550
Louisiana	176,994	Utah	42,084
Maine	36,621	Vermont	19,384
Maryland	131,337	Virginia	190,282
Massachusetts	301,552	Washington	90,673
Michigan	76,601	West Virginia	49,627
Minnesota	120,638	Wisconsin	76,693
Mississippi	99,379	Wyoming	9,809
Missouri	145,438	**Total**	**$7,340,691**

Source: Bureau of the Census, U.S. Department of Commerce.

Insurance Guaranty Funds

All 50 states, Washington, D.C., and Puerto Rico have procedures under which solvent property/casualty insurance companies cover claims against insolvent insurers. New York has a pre-assessment system which requires the maintenance of a permanent fund (to which companies contribute) with a $200 million ceiling. The other jurisdictions have set up guaranty associations to which solvent companies pay assessments as needed on a proportionate basis.The National Conference of Insurance Guaranty Funds (NCIGF) began to function on January 1, 1990 as a not-for-profit organization. It replaces the National Committee on Insurance Guaranty Funds. Made up of and funded by 47 post-assessment guaranty funds, the primary purpose of NCIGF is to assist the individual guaranty funds in fulfilling their statutory obligations and to facilitate interfund communication and cooperation in meeting the increasingly complex demands of those objectives.

In 1989, the post-assessment guaranty funds assessed $824.73 million against property/casualty insurance companies to pay claims arising from insolvencies. The funds returned $49.77 million to insurers, resulting in net assessments of $774.9 million. These figures include 23 new property/casualty insolvencies (based on those ordered liquidated in 1989).

Net assessments in 1989 represented approximately 0.4 percent of the national property/casualty premium; in 1988 they represented approximately 0.25 percent.

GUARANTY FUND ASSESSMENTS BY STATE, 1969-1989

($1,000)

State	Amount collected	Amount refunded	Net assessments	State	Amount collected	Amount refunded	Net assessments
Ala.	$41,523	$0	$41,523	Mich.	$146,582	$8,492	$138,090
Alaska	12,246	1,403	10,843	Minn.	133,058	6,030	127,028
Ariz.	41,243	0	41,243	Miss.	39,763	2,134	37,629
Ark.	16,570	0	16,570	Mo.	22,280	849	21,431
Calif.	984,752	45,746	939,006	Mont.	28,207	598	27,609
Colo.	37,561	2,360	35,201	Neb.	31,294	14,617	16,677
Conn.	115,615	21,179	94,436	Nev.	20,092	2,430	17,661
Del.	37,727	0	37,727	N.H.	16,809	1,753	15,056
D.C.	7,726	1,339	6,387	N.J.	20,385	9,985	10,400
Fla.	386,516	13,195	373,321	N.M.	8,377	0	8,377
Ga.	58,327	4,834	53,492	N.Y.*	*	*	*
Hawaii	35,251	500	34,751	N.C.	16,226	1,121	15,104
Idaho	8,481	140	8,341	N.D.	4,400	0	4,400
Ill.	209,658	20,150	189,508	Ohio	67,410	5,431	61,979
Ind.	11,328	1,245	10,083	Okla.	67,979	0	67,979
Iowa	38,409	3,310	35,098	Ore.	25,236	0	25,236
Kan.	18,355	1,357	16,998	Pa.	149,825	7,837	141,988
Ky.	21,341	662	20,679	P.R.	49,693	19,409	30,284
La.	126,474	3,973	122,501	R.I.	14,168	1,270	12,898
Maine	35,151	5,526	29,625	S.C.	22,674	1 636	21,038
Md.	36,661	1,090	35,571	S.D.	2,954	0	2,954
Mass.	93,424	10,314	83,110	Tenn.	19,948	280	19,667

(Table continues)

State	Amount collected	Amount refunded	Net assessments
Texas	$192,853	0	$192,853
Utah	12,131	0	12,131
Vt.	6,743	765	5,978
Va.	27,108	5,312	21,796
Wash.	28,617	292	28,325
W.Va.	$17,234	$3,132	$14,102
Wis.	36,007	2,999	33,008
Wyo.	2,542	90	2,453
Total	**$3,604,930**	**$234,786**	**$3,370,144**

*New York has a pre-assessment fund.

Source: National Conference of Insurance Guaranty Funds.

To the right are the yearly totals for insurance company payments to state post-assessment guaranty funds since 1985. The figures do not include assessments made under New York's pre-assessment insolvency fund nor payments made by individual companies under the insolvency provision of the uninsured motorist endorsement to auto insurance policies. They also do not take into consideration recoupments available through premium tax offsets and policyholder surcharges.

TOTAL GUARANTY FUND NET ASSESSMENTS BY YEAR

(in millions)

Year	Amount
1969-1984	$393.2
1985	323.0
1986	527.9
1987	907.1
1988	452.4
1989	774.9

Source: Insurance Information Institute.

Shared Markets

The Automobile Shared Market

Data provided by the Automobile Insurance Plans Service Office (AIPSO) reflect an increase of only 1.62 percent from 1988 to 1989 in the number of cars insured through the various shared market mechanisms countrywide. The increase from 1987 to 1988 was 6.45 percent; from 1986 to 1987 it was 14.7 percent. Only 12 states reported increases in 1989, with California being by far the largest at 51.9 percent.

The insurance industry has established mechanisms in every state to provide automobile insurance for drivers who, for whatever reason, are unable to obtain coverage in the voluntary market. The first of the shared market mechanisms was established in New Hampshire in 1938. Today, all 50 states and the District of Columbia use one of four systems to guarantee the availability of auto insurance.

- Automobile Insurance Plan—Auto insurance applicants unable to obtain coverage in the competitive market are distributed to insurance companies in proportion to the amount of business each insurer writes voluntarily in the state. The insurers service these policyholders in the same way they service their other customers.
- Joint Underwriting Associations (JUAs) are pooling mechanisms where all companies share in the profits and losses as well as expenses incurred in the shared market. Agents submit applications to several companies which have agreed to issue and service policies.
- Reinsurance Facility—Under this pooling system, each auto insurer is required to provide coverage and service the claims for any applicant, but is permitted to transfer a percentage of its policies to the facility. Profits or losses are shared by all insurers licensed in the state.
- State Fund—Maryland established a state–fund mechanism in 1973. Private insurers don't participate directly in the Maryland Automobile Insurance Fund, but are required by law to subsidize any losses from the operation, with the costs being charged back to their own policyholders.

PRIVATE PASSENGER CARS INSURED IN SHARED MARKETS, 1988-1989

(Written car years)

State	1989	1988	% change	State	1989	1988	% change
Ala.	1,693	2,110	-19.76%	Mont.	141	176	-19.89%
Alaska	3,752	4,614	-18.68	Neb.	419	509	-17.68
Ariz.	73	150	-51.33	Nev.	65	67	-2.99
Ark.	1,200	1,754	-31.58	N.H.	209,008*	196,570	+6.33
Calif.	1,221,559	804,146	+51.91	N.J.	1,151,152	1,714,118	-32.84
Colo.	236	231	+2.16	N.M.	214	227	-5.73
Conn.	158,951	194,175	-18.14	N.Y.	1,341,712	1,324,687	+1.29
Del.	30,497	29,334	+3.96	N.C.	1,258,573*	997,861	+26.13
D.C.	31,331	31,550	-0.69	N.D.	103	171	-39.77
Fla.	57,809	100,075	-42.23	Ohio	299	486	-38.48
Ga.	36,020	40,061	-10.09	Okla.	3,120	3,912	-20.25
Hawaii	7,474	7,390	+1.14	Ore.	798	1,144	-30.24
Idaho	212	223	-4.93	Pa.	175,820	152,887	+15.00
Ill.	3,098	3,110	-0.39	R.I.	58,618	61,468	-4.64
Ind.	849	1,114	-23.79	S.C.	712,255	680,465	+4.67
Iowa	612	632	-3.16	S.D.	239	316	-24.37
Kan.	7,007	8,799	-20.37	Tenn.	14,747	18,417	-19.93
Ky.	20,200	28,023	-27.92	Texas	191,536	202,247	-5.30
La.	6,394	7,258	-11.90	Utah	63	108	-41.67
Maine	36,322	48,642	-25.33	Vt.	16,371	15,930	+2.77
Md.	68,545*	76,160	-10.00	Va.	120,181	117,309	+2.45
Mass.	2,340,012	2,187,541	+6.97	Wash.	2,736	2,777	-1.48
Mich.	99,988	162,222	-38.36	W.Va.	2,873	3,164	-9.20
Minn.	8,836	15,259	-42.09	Wis.	556	904	-38.50
Miss.	6,917	7,202	-3.96	Wyo.	49	69	-28.99
Mo.	6,495	9,501	-31.64	**Total**	**9,417,730**	**9,267,265**	**+1.62**

*Estimated

Source: State shared-market mechanisms in Maryland and Massachusetts; Automobile Insurance Plans Service Office for all other states.

Insurance through FAIR Plans

Fair Access to Insurance Requirement (FAIR) plans, operated by the insurance industry, were created to make property insurance more readily available to those who had difficulty obtaining it because of abnormal exposure to risks over which they had no control. FAIR plans now operate in 29 states and in Washington, D.C. Puerto Rico, previously included in this report, has provided no information since 1978, and is therefore no longer included. The final column, "Exposure," replaces "Insurance in Force," and is defined as "...the estimate of the aggregate value of all insurance in force on all lines (except Crime and Liability where applicable) on the last day of the period." Applications and Binders/policies issued (both new and renewal) decreased for the second straight year, probably reflecting the increased availability of regular insurance policies.

INSURANCE PROVIDED BY FAIR PLANS, 1989

Jurisdiction	Applications New	Applications Renewal	Binders/policies issued New	Binders/policies issued Renewal	Exposure (*$1,000*)
Arkansas (Rural)	N.A.	N.A.	N.A.	N.A.	N.A.
California	51,422	110,796	22,546	101,546	$17,926,751
Connecticut	2,073	3,721	809	3,422	538,187
Delaware	616	1,738	428	1,656	N.A.
Dist. of Col.	1,940	3,317	623	3,063	329,647
Georgia	4,864	6,478	2,665	5,693	419,560
Illinois	7,792	19,086	3,586	16,686	951,365
Indiana	771	2,156	504	2,132	73,596
Iowa	449	845	347	835	30,075
Kansas	2,578	5,116	1,796	5,126	151,831
Kentucky	14,692	0*	12,704	44,807	359,432
Louisiana	3,380	3,010	653	2,779	97,586
Maryland	4,574	10,053	1,561	8,517	277,719
Massachusetts	16,830	45,932	10,554	40,666	3,444,146
Michigan	40,610	165,953	34,654	151,423	6,348,230
Minnesota	1,786	2,118	1,447	1,544	121,350
Mississippi (Rural)	N.A.	N.A.	N.A.	N.A.	N.A.
Missouri	11,750	25,734	3,725	21,968	537,313
New Jersey	14,010	48,579	9,844	44,640	3,494,998
New Mexico	3,230	8,553	3,205	8,553	456,276
New York	19,476	69,451	10,422	69,451	5,740,202
North Carolina	17,997	28,940	11,404	23,481	1,232,268
Ohio	5,717	14,890	4,163	14,475	377,555
Oregon	1,532	4,693	1,478	4,693	N.A.
Pennsylvania	24,081	62,854	15,047	61,224	N.A.
Rhode Island	2,679	6,882	1,820	5,476	388,161
Virginia	5,131	12,228	3,366	11,414	476,800
Washington	185	659	119	628	69,624
West Virginia	916	1,310	475	1,084	N.A.
Wisconsin	3,859	6,463	2,114	4,537	N.A.
Totals	**264,940**	**671,555**	**162,059**	**661,519**	**$43,842,672**

*Kentucky automatically renews any expired policy eligible for renewal, which is why the number of renewal applications is always "0". N.A. = Not available.

Source: National Committee on Property Insurance.

Insurance through Beach and Windstorm Plans

In 1989, beach plans, which operate on the Atlantic and Gulf Coasts where storm damage risk is especially high, saw a 4 percent increase in policies and a 3 percent rise in insurance in force.

INSURANCE PROVIDED BY BEACH AND WINDSTORM PLANS, 1989

State	Applications New	Applications Renewal	Binders or policies issued New	Binders or policies issued Renewal	Insurance in force, Dec. 31 (*$1,000*)
Alabama	372	2,851	251	2,851	$182,987
Florida	11,726	53,040	7,915	53,040	6,360,121
Louisiana	1,946	6,378	1,071	6,133	184,739
Mississippi	1,775	3,860	1,611	3,694	379,592
No. Carolina	8,930	18,333	5,491	9,962	1,543,634
So. Carolina	953	5,361	835	5,339	920,300
Texas	68,963	*	43,658	*	4,236,600
Totals	**94,665**	**89,823**	**60,832**	**81,019**	**$13,807,973**

*Included with "New".

Source: National Committee on Property Insurance.

Government Insurance Programs

Flood Insurance in the United States

September's Hurricane Hugo resulted in the largest number of claims and the highest payout from a single event in the history of the National Flood Insurance Program (NFIP). The storm generated nearly 17,000 claims that required more than $350 million to close. The total amount of flood claims paid in 1989 was $513 million.

Most coverage in the affected areas was written by private-sector insurance companies participating in the NFIP's Write Your Own (WYO) program. In this program, the companies have arrangements with the federal government to sell and service flood insurance under their own names while the government underwrites the coverage.

Because the Federal Insurance Administration, which oversees the NFIP, had attained its goal of making the program self-supporting in the average historical loss year, there were sufficient policyholder reserves to meet the Hurricane Hugo payouts.

Flood coverage is available in those communities which have joined the NFIP by agreeing to adopt and enforce floodplain management ordinances designed to reduce future flood losses. Nearly 18,000 communities participate in the NFIP, with over 2.3 million policyholders protected by more than $180 billion in coverage.

For 1989, the total earned premium of the NFIP was $548 million. It paid out $2.8 billion between 1978 and early 1990 to settle 342,000 claims for flood damage.

Early in 1989, the NFIP began offering two new policies. The condominium master policy provides coverage for all units of certain condominiums at more attractive rates than coverage for individual unit owners.

The preferred risk policy is available for owners of properties outside special flood hazard areas at three set coverage levels, each at predetermined rates. The lowest rate for the preferred risk coverage is $75 per year, which provides $20,000 coverage for buildings without basements and $5,000 coverage for their contents.

FLOOD INSURANCE IN THE UNITED STATES, 1989

State	Direct NFIP business Policies(#)	Direct NFIP business ($)*	WYO business Policies(#)	WYO business ($)*	NFIP/WYO combined Policies(#)	NFIP/WYO combined ($)*
Ala.	4,043	$285,487	14,133	$898,491	18,176	$1,183,979
Alaska	617	46,104	1,251	92,566	1,868	138,670
Ariz.	6,028	422,078	13,933	1,002,215	19,961	1,424,293
Ark.	2,784	129,244	4,818	210,528	7,602	339,772
Calif.	49,853	4,463,959	75,250	6,729,202	125,103	11,193,161
Colo.	3,630	268,283	4,040	300,186	7,670	568,469
Conn.	9,409	927,797	8,885	933,814	18,294	1,861,611
Del.	1,450	161,153	6,400	675,509	7,850	836,662
D.C.	34	5,844	12	1,596	46	7,440
Fla.	42,861	3,878,264	794,444	70,088,229	837,305	73,966,493
Ga.	4,148	322,638	18,450	1,720,564	22,598	2,043,202
Hawaii	1,593	184,798	10,246	1,146,836	11,839	1,331,634
Idaho	942	51,450	908	55,559	1,850	107,009
Ill.	11,152	623,896	13,274	773,252	24,426	1,397,148
Ind.	6,314	276,748	7,593	344,835	13,907	621,583
Iowa	1,972	86,878	2,528	114,365	4,500	201,243
Kan.	3,345	145,014	3,417	148,586	6,762	293,600
Ky.	3,055	162,034	11,405	525,153	14,460	687,187
La.	21,525	1,516,050	222,615	16,382,059	222,615	16,382,059
Maine	1,619	111,405	3,657	237,329	5,276	348,734
Md.	5,435	476,626	22,750	1,802,834	28,185	2,279,460
Mass.	16,574	1,428,026	8,355	937,966	24,929	2,365,992
Mich.	5,474	316,657	8,919	520,030	14,393	836,687
Minn.	1,969	111,203	3,388	162,162	5,357	273,366
Miss.	3,725	221,105	27,856	1,890,448	31,581	2,111,553
Mo.	6,382	296,373	7,492	361,050	13,874	657,423
Mont.	868	42,767	541	26,585	1,409	69,352
Neb.	2,398	107,165	5,267	238,807	7,665	345,972
Nev.	2,556	155,261	3,028	170,081	5,584	325,342
N.H.	1,354	95,123	1,427	100,729	2,781	195,852
N.J.	29,068	2,905,486	89,842	9,068,219	118,910	11,973,705
N.M.	2,103	97,483	2,902	152,210	5,005	249,693
N.Y.	26,395	2,206,703	37,407	3,288,162	63,802	5,494,865
N.C.	9,558	821,396	32,456	2,599,899	42,014	3,421,294
N.D.	1,771	75,846	3,945	168,330	5,716	244,177
Ohio	6,859	340,280	7,781	370,168	14,640	710,447
Okla.	6,005	397,532	4,735	310,631	10,740	708,163
Ore.	3,063	208,546	2,742	175,791	5,805	384,337
Pa.	17,546	960,120	34,625	1,900,959	52,171	2,861,079
R.I.	4,544	391,595	3,300	303,285	7,844	694,880
S.C.	3,046	309,751	49,014	5,006,711	52,060	5,316,462
S.D.	451	23,400	441	24,242	892	47,641
Tenn.	2,804	185,245	4,558	293,716	7,362	478,961
Texas	27,502	2,372,639	194,004	18,212,833	221,506	20,585,472
Utah	712	40,769	634	38,641	1,346	79,410
Vt.	781	40,736	1,183	65,391	1,964	106,127
Va.	6,982	541,487	33,478	2,998,264	40,460	3,539,751
Wash.	5,928	383,350	4,296	262,307	10,224	645,657
W. Va.	4,040	168,422	8,479	336,669	12,519	505,091
Wis.	3,078	148,691	2,997	143,426	6,075	292,117
Wyo.	609	34,062	659	35,431	1,268	69,493
Guam	19	1,046	0	0	19	1,046

*Final "000" omitted; some totals do not balance because of rounding.

(Table continues)

	Direct NFIP business		WYO business		NFIP/WYO combined	
State	Policies(#)	($)*	Policies(#)	($)*	Policies(#)	($)*
P.R.	2,908	106,434	8,760	313,896	11,668	420,330
V.I.	1,566	83,083	569	51,003	2,135	134,086
Totals	**390,447**	**$30,163,528**	**1,835,089**	**$154,711,750**	**2,201,227**	**$183,229,984**

*Final "000" omitted; some totals do not balance because of rounding.

Source: Federal Insurance Administration, Federal Emergency Management Agency.

Federal Crime Insurance

In 1989, 14 states, Washington, D.C., Puerto Rico and the Virgin Islands participated in the Federal Crime Insurance Program. From the end of 1988 to year-end 1989, the number of policies in force decreased by about 9 percent, and the amount of coverage in force declined by about 10 percent. The states of California, Delaware and Georgia showed an increase in the number of residential policies, but there was no growth in commercial policies in force in 1989.

The Federal Crime Insurance Program, established by Congress in 1970, began operation Aug. 1, 1971. It is administered by the Federal Insurance Administrator, who is authorized to make federal crime insurance policies available in states where an availability problem exists. Policies, for both individuals and businesses, cover losses due to burglary and robbery.

National Con-Serv, Inc., a Maryland Corporation, acts as the servicing carrier. Policies are sold through licensed property insurance agents and brokers and also directly by the servicing carrier.

FEDERAL CRIME INSURANCE, YEAR END 1989

	Policies in force			Insurance in force (*$1,000*)		
State	Residential	Commercial	Total	Residential	Commercial	Total
Alabama	669	11	680	$ 5,484	$ 111	$ 5,595
California	1,630	435	2,065	13,665	6,283	19,948
Connecticut	81	17	98	674	118	792
Delaware	114	2	116	800	30	830
Dist. of Col.	42	60	102	341	751	1,092
Florida	1,457	557	2,014	12,879	7,380	20,259
Georgia	301	100	401	2,397	966	3,363
Illinois	256	291	547	2,023	2,660	4,683
Kansas	240	13	253	1,536	118	1,654
Maryland	55	85	140	441	1,080	1,521
New Jersey	1,095	189	1,284	8,965	2,316	11,281
New York	10,130	3,789	13,919	85,610	50,442	136,052
Pennsylvania	1,440	338	1,778	10,402	3,939	14,341
Rhode Island	13	17	30	102	132	234
Tennessee	109	93	202	832	763	1,595
Puerto Rico	517	135	652	4,495	1,603	6,098
Virgin Islands	158	20	178	1,102	220	1,322
Totals	**18,307**	**6,152**	**24,459**	**$151,748**	**$78,912**	**$230,660**

Source: Federal Insurance Administration, Crime Insurance Statistical Report.

CHAPTER 5

Factors Affecting Cost

Trends in Costs of Goods, Services, and Insurance

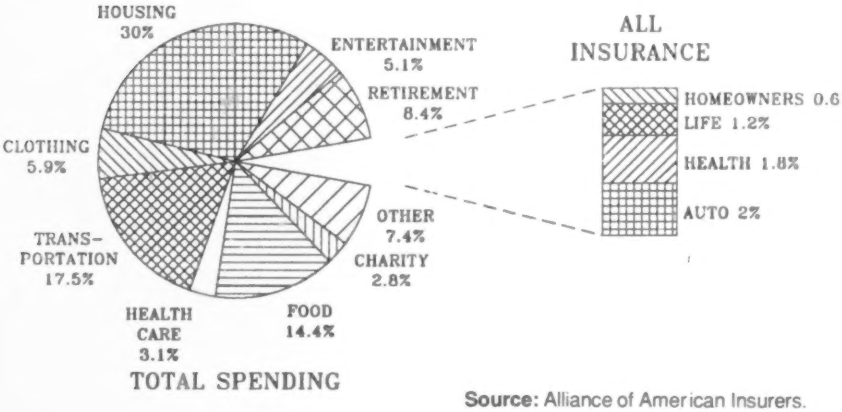
Bureau of Labor Statistics (BLS) data on household expenditures provide a comprehensive picture of how U.S. households spend their money. As the chart below shows, expenditures for all kinds of insurance represent 5.6 percent of all household spending. Household expenditures for insurance rank behind housing, transportation, food, contributions to pension plans (which include Social Security taxes), and clothing.

Auto insurance accounts for an average of 2.0 percent of total household spending, while homeowners insurance amounts to 0.6 percent. (Life and health insurance account for 1.2 and 1.6 percent, respectively, of household spending.)

As household income increases, says the Alliance of American Insurers, which studies the data, there is a slight downward trend in insurance expenditures as a percentage of total spending. This variation is mostly in health insurance, however. Expenditures for home and auto insurance remain about the same percentage across all income classes.

As is often the case, the key word is average. Household location often affects what is spent on auto and homeowners insurance. Rural households, for example, spend less than urban households on auto insurance; regional variations in the market value of homes affect spending on homeowners insurance. In addition to number and type of

INSURANCE EXPENDITURES AS A PERCENTAGE OF TOTAL HOUSEHOLD SPENDING



Source: Alliance of American Insurers.

cars, where they are driven and by whom, auto insurance costs are influenced by such factors as how rates are set (by the state or in a competitive market), how claims are handled (no-fault or by the tort system), and how the insurer markets the product.

The cost of all types of insurance is heavily influenced by the costs of materials and services paid by insurers to meet insurance claims. The indices which follow show trends in insurance costs and in typical costs which affect insurance claims. (Except as otherwise noted, all index figures are annual averages.)

Other sections in this chapter discuss major trends which, directly or indirectly, are affecting insurance costs—in most cases, driving prices upward.

PRICE INDICES FOR HOUSEHOLD INSURANCE AND RELATED ITEMS AND ANNUAL RATES OF CHANGE, 1980–1989

(Base: 1982–84= 100)

	Cost of living (all items)		**Homeowners' costs***		**House maintenance and repairs**	
Year	**Index**	**% change**	**Index**	**% change**	**Index**	**% change**
1980	82.4	+13.5			82.4	+11.4
1981	90.9	+10.3			90.7	+10.1
1982	96.5	+6.2			96.4	+6.3
1983	99.6	+3.2	102.5		99.9	+3.6
1984	103.9	+4.3	107.3	+4.7	103.7	+3.8
1985	107.6	+3.6	113.1	+5.4	106.5	+2.7
1986	109.6	+1.9	119.4	+5.6	107.9	+1.3
1987	113.6	+3.6	124.8	+4.5	111.8	+3.6
1988	118.3	+4.1	131.1	+5.0	114.7	+2.6
1989	124.0	+4.8	137.3	+4.7	118.0	+ 2.9
% change, 1980–1989		+50.5		N.A.		+43.2

	Renters' costs*		**House furnishings**		**Household insurance****	
Year	**Index**	**% change**	**Index**	**% change**	**Index**	**% change**
1980			88.5	+6.8		
1981			94.1	+6.3		
1982			98.5	+4.7		
1983	103.0		100.4	+1.9	103.2	
1984	108.6	+5.4	101.2	+0.8	107.5	+4.2
1985	115.4	+6.3	101.7	+0.5	112.4	+4.6
1986	121.9	+5.6	102.2	+0.5	119.2	+6.0
1987	128.1	+5.1	103.6	+1.4	124.0	+4.0
1988	133.6	+4.3	105.1	+1.4	129.0	+4.0
1989	138.9	+4.0	105.5	+0.4	132.6	+2.8
% change, 1980–1989		N.A.		+19.2		N.A.

*Indexing of homeowners' and renters' costs and household insurance was started in 1983 with a base of 100 as of December 1982. Previously indexed items which have been discontinued include home ownership and property insurance premiums (up 130.3 and 139.6 percent, respectively, between 1974 and 1983).
**Household insurance is based on tenants' insurance policies; it does not measure homeowners insurance. N.A. = Not applicable.
Source: U.S. Department of Labor, Bureau of Labor Statistics.

PRICE INDICES FOR AUTO INSURANCE AND RELATED ITEMS AND ANNUAL RATES OF CHANGE, 1980–1989

(Base: 1982–84= 100)

	Medical care items		Hospital rooms		Physicians' fees		Auto insurance	
Year	Index	% change	Index	% change	Index	% change	Index	% change
1980	74.9	+11.0	68.0	+13.1	76.5	+10.5	82.0	+8.2
1981	82.9	+10.7	78.1	+14.9	84.9	+11.0	85.9	+4.8
1982	92.5	+11.6	90.4	+15.7	92.9	+9.4	91.4	+6.4
1983	100.6	+8.8	100.6	+11.3	100.1	+7.8	100.4	+9.8
1984	106.8	+6.2	109.0	+8.3	107.0	+6.9	108.2	+7.8
1985	113.5	+6.3	115.4	+5.9	113.3	+5.9	119.2	+10.2
1986	122.0	+7.5	122.3	+6.0	121.5	+7.2	135.0	+13.3
1987	130.1	+6.6	131.1	+7.2	130.4	+7.3	146.2	+8.3
1988	138.6	+6.5	143.3	+9.3	139.8	+7.2	156.6	+7.1
1989	149.3	+7.7	158.1	+10.3	150.1	+7.4	166.6	+6.4
% change, 1980–1989		+99.3		+110.7		+96.2		+103.2
% change, 1981-1989								+93.9

	Auto Repair Costs per Claim							
	Parts[1]		Labor[2]		Taxes and Other[3]		Total	
Year	Amount	% change	Amount	% change	Amount	% change	Amount	% change
1981	$512.75		$391.75		$55.74		$960.24	
1982	548.14	+6.9	413.79	+5.6	65.16	+16.9	1,027.09	+7.0
1983	579.24	+5.7	431.58	+4.3	72.73	+11.6	1,083.55	+5.5
1984	602.96	+4.1	457.40	+6.0	73.79	+1.5	1,134.15	+4.7
1985	637.53	+5.7	507.55	+11.0	79.83	+8.2	1,224.91	+8.0
1986	705.69	+10.7	559.86	+10.3	89.44	+12.0	1,354.99	+10.6
1987	767.09	+8.7	613.13	+9.5	100.17	+12.0	1,480.39	+9.3
1988	861.37	+12.3	663.68	+8.2	113.54	+13.3	1,638.59	+10.7
1989	884.46	+2.7	719.94	+8.5	141.86	+24.9	1,746.26	+6.6
% change, 1981–1989		+72.5		+83.8		+154.5		+81.9

[1] Consists of original equipment manufacturers' (OEM) parts, non-OEM parts (aftermarket), salvage parts, and paint and related materials.

[2] Includes labor costs of sheet metal, mechanical/electrical, frame, and refinishing workers.

[3] Other costs are taxes on parts and labor, towing and storing, and sublet repair.

Sources: Auto repair costs, Report of the National Association of Insurance Commissioners Special Advisory Committee on Auto Repair Costs; all other data, U.S. Department of Labor, Bureau of Labor Statistics.

Health Care Costs

The cost of health care in the United States was $539.9 billion in 1988, 117 percent greater than the sum spent in 1980, according to the Department of Health and Human Services (HHS). As such, 1988 national health expenditures accounted for 11.1 percent of the gross national product, up from 9.1 percent in 1980, 7.3 percent in 1970, and 5.3 percent in 1960.

Health care expenditures increased 10.4 percent in 1988 over the previous year, resuming a double-digit growth rate after a period of more moderate increases. The growth rate of national health expenditures at the beginning of this decade (1980) was 15 percent. It then increased at an average annual rate of 11 percent through 1985; it slowed to 7.2 percent in 1986 and 8.5 percent in 1987. Health spending in 1988 translates into $2,124 for each person, a 100 percent increase in per-capita spending since 1980.

Personal health expenditures, which are the major component of national health spending, increased 10 percent in 1988. This increase was made up of the following factors: general rate of inflation, 43 percent; medical price inflation, 24 percent; population changes, 10 percent; other factors (such as utilization of technology, and volume and intensity of health care services), 23 percent.

HHS said hospital care accounted for $211.8 billion, or 39 percent of the nation's total health expenditures, in 1988. According to a survey by the Health Insurance Association of America (HIAA), as shown below, the average semiprivate hospital room cost $297 per day as of January 1990. This represents a 12.5 percent increase over the January 1989 figure of $264.

The HIAA data change from year to year because the association uses only matching data, i.e., data for the same hospital for both years reported. For this reason, the 1989 HIAA data for some states in this edition of *Insurance Facts* are different than the 1989 data given in last year's edition.

HOSPITAL SEMIPRIVATE ROOM RATES*, JANUARY1989-90

State	**1990**	**1989**	**% increase**	**State**	**1990**	**1989**	**% increase**
Ala.	$210	$187	12.3	Neb.	$209	$185	13.0
Alaska	407	378	7.7	Nev.	251	239	5.0
Ariz.	300	256	17.2	N.H.	304	272	11.8
Ark.	170	161	5.6	N.J.	273	226	20.8
Calif.	**453**	**391**	**15.9**	**N.M.**	**254**	**240**	**5.8**
Colo.	**321**	**273**	**17.5**	**N.Y.**	**339**	**301**	**12.6**
Conn.	**456**	**396**	**15.2**	**N.C.**	**220**	**185**	**18.9**
Del.	**385**	**350**	**10.0**	**N.D.**	**230**	**213**	**7.9**
D.C.	325	325	0.0	Ohio	308	281	9.6
Fla.	271	239	13.4	Okla.	220	205	7.3
Ga.	198	180	10.0	Ore.	338	301	12.3
Hawaii	348	317	9.8	Pa.	375	318	17.9
Idaho	**259**	**233**	**11.2**	**R.I.**	**342**	**296**	**15.5**
Ill.	**300**	**275**	**9.1**	**S.C.**	**212**	**199**	**6.5**
Ind.	**258**	**225**	**14.7**	**S.D.**	**209**	**187**	**11.8**
Iowa	**221**	**210**	**5.2**	**Tenn.**	**182**	**172**	**5.8**
Kan.	256	239	7.1	Texas	223	202	10.4
Ky.	242	217	11.5	Utah	353	328	7.6
La.	203	181	12.2	Vt.	378	303	24.8
Maine	335	279	20.1	Va.	220	194	13.4
Md.	**266**	**233**	**14.2**	**Wash.**	**334**	**298**	**12.1**
Mass.	**351**	**327**	**7.3**	**W.Va.**	**223**	**213**	**4.7**
Mich.	**337**	**313**	**7.7**	**Wis.**	**222**	**214**	**3.7**
Minn.	**282**	**244**	**15.6**	**Wyo.**	**234**	**219**	**6.9**
Miss.	167	142	17.6	P.R.	158	154	2.6
Mo.	268	246	8.9	**National**	**$297**	**$264**	**12.5**
Mont.	318	284	12.0				

*Data apply to medical-surgical semiprivate accommodations and exclude pediatric, intensive care, cardiac care, extended care, self-care, psychiatric, and tuberculosis beds.
Source: Health Insurance Association of America.

Personal Injury Lawsuits

The cost of liability insurance is significantly affected by the number of lawsuits and the size of settlements and jury awards.

Jury Verdict Research, Inc. (JVR), which is based in Solon, Ohio, has maintained for three decades a nationwide database of personal injury plaintiff and defense verdicts. A nationwide network of court clerks, plaintiff and defense attorneys, law clerks, legal reporters, and law students is the source of its data.

JVR reports that from 1987 to 1988 the increase in personal injury verdict size averaged 6.7 percent; verdict size increased the most for vertebrae fracture and the least for cervical strain cases; a decrease was observed in the size of midpoint verdicts for knee injury, paraplegia and the death of adult males.

JVR has kept records of million-dollar verdicts since the first one was recorded in 1962. In 1988 there were 474 million-dollar verdicts, a slight increase over the 1987 total of 467. Some 4,151 million-dollar verdicts were recorded through 1989, but that year's data are still incomplete. The largest source of million-dollar awards has been product liability suits (843) followed closely by medical malpractice (833) and vehicular liability cases (687, including bus and bicycle accidents).

New York (707), California (540) and Florida (504) reported 42 percent of all million-dollar awards.

Some of these awards are far higher than one million dollars. For example, in 1988 $22,200,000 was awarded to a two-year-old male who sustained brain damage and $40,000,000 to an ironworker who was rendered paraplegic.

JVR reports that, generally, plaintiffs do not win medical malpractice or product liability suits as frequently as they do other liability suits, but when they do win, they tend to win higher awards than awards for similar injuries resulting from other liability situations.

Of the total of million-dollar medical malpractice claims reported since 1962, 81 percent have been reported since 1980. In addition, the number of million-dollar verdicts has increased each year.

Annual state-by-state compilations by the Administrative Office of the U.S. Courts showed that despite the overall drop in civil filings, there was a dramatic increase in the number of asbestos personal injury product liability filings. The number jumped from 7,718 in 1989 to 12,822 in 1990 (a 66 percent increase). More than 7,000 asbestos cases have been pending for two to three years.

PRODUCT LIABILITY CASES OPENED IN FEDERAL DISTRICT COURTS, 1988-1989

State	1989*	1988*	% change
Ala.	200	275	-27.3
Alaska	27	39	-30.8
Ariz.	86	133	-35.3
Ark.	185	155	+19.4
Calif.	306	475	-35.6
Colo.	71	84	-15.5
Conn.	187	179	+4.5
Del.	26	25	+4.0

(Table continues)

State	1989*	1988*	% change
D.C.	56	70	-20.0
Fla.	345	378	-8.7
Ga.	328	360	-8.9
Hawaii	60	501	-88.0
Idaho	29	33	-12.1
Ill.	304	335	-9.3
Ind.	120	102	+17.6
Iowa	99	934	-89.4
Kan.	60	76	-21.1
Ky.	123	147	-16.3
La.	418	489	-14.5
Maine	50	55	-9.1
Md.	349	242	+44.2
Mass.	380	317	+19.9
Mich.	315	693	-54.5
Minn.	70	114	-38.6
Miss.	525	325	+61.5
Mo.	195	186	+4.8
Mont.	45	51	-11.8
Neb.	43	119	-63.9
Nev.	35	27	+29.6
N.H.	42	44	-4.5
N.J.	169	161	+5.0
N.M.	65	45	+44.4
N.Y.	1,203	792	+51.9
N.C.	156	132	+18.2
N.D.	63	20	+215.0
Ohio	1,999	2,831	-29.4
Okla.	654	298	+119.5
Ore.	69	98	-29.6
Pa.	2,255	2,985	-24.5
R.I.	58	68	-14.7
S.C.	237	204	+16.2
S.D.	28	18	+55.6
Tenn.	231	241	-4.1
Texas	1,236	1,425	-13.3
Utah	46	40	+15.0
Vt.	10	18	-44.4
Va.	336	405	-17.0
Wash.	81	93	-12.9
W. Va.	244	146	+67.1
Wis.	61	71	-14.1
Wyo.	17	22	-22.7
P.R.	19	34	-44.1
Guam	1	–	–
N.M.I.	–	–	–
V.I.	31	30	+3.3
Total	**14,348**	**17,140**	**-16.3**

*Twelve-month period ended June 30.

Source: Administrative Office of the U.S.Courts, 1989 Annual Report.

Medical Malpractice

The crisis in professional liability insurance for physicians, commonly called medical malpractice insurance, seems to be abating but is not over. Rates had escalated sharply in the 1980s, reflecting huge increases in claims costs but, by early 1989, reports from various sources showed that conditions nationwide finally were improving. The most significant change was in the number of claims, which peaked in 1985 and began to fall through 1989.

But the size of claims, the dollar amount, is still rising. A January 1990 study by Jury Verdict Research, Inc. found that the number of million-dollar awards is rising again. Of the 398 medical malpractice awards reported to the service in 1988, 100 or 25 percent totaled $1 million or more, up a sharp 47 percent from 1987 when there were 68 awards in this range. Moreover, in the first four months of 1989 alone, Jury Verdict Research reported 105 million-dollar awards, a figure already beyond the total for 1988.

One aspect of the medical malpractice crisis is its impact on obstetrics, a high-risk specialty where premiums are especially high. A survey by the American College of Obstetricians and Gynecologists showed that one out of eight physicians specializing in pregnancy has stopped delivering babies due to the threat of malpractice suits. The College predicted that there will be more physicians leaving obstetrics at the height of their professional ability. The survey showed that two-thirds of those who had stopped delivering babies ceased practicing before age 55. In 1985, only 54 percent stopped delivering babies before that age. Previous studies have shown that this trend hits rural areas of the nation hardest.

A similar situation is becoming apparent at academic health centers, which provide education for health care professionals, conduct the vast majority of the nation's clinical and basic medical research, and offer patients state- of-the-art care and technology. According to the *New England Journal of Medicine*, the fear of liability suits has caused academic medical centers to change the ways in which medical students are taught and evaluated, and to reassess the amount of hands-on experience medical students and house staff should be allowed. The fear of liability has crippled medical research and development of new medical devices, drugs and surgical procedures. Due to high medical malpractice liability costs, doctors increased their referrals of risky patients to specialists and academic health centers.

To help reduce the number and size of medical malpractice claims and thus stem the spiraling increases in medical malpractice insurance costs, the insurance industry joined forces with the medical community to promote various reforms of the tort system. These include the modification of the collateral source rule which allows plaintiffs to receive compensation from several sources and provision for periodic payment of damages. (See also The Civil Justice System.)

Stable insurance rates or rate cuts were widely reported in the second half of 1989. One major insurer cut rates in 34 states and has announced another round of decreases, effective in July 1990, for 21 of the 42 states in which it operates.

Rates for medical malpractice insurance dropped because of a continuing decline in the number of claims, although the rate of decrease now appears to be leveling out. This decline, in turn, lowers overall compensation payments and also administrative and legal expenses. Observers attribute the drop in the number of claims filed to such factors as changes in the legal environment brought about by recent tort reform measures; increased communication between doctors and their patients; and more diagnostic testing.

According to one large insurance company, in 1985 the number of claims filed peaked at 17 per 100 doctors insured. The number of claims began to decline in 1986, and fell to 12 claims per 100 doctors by 1989. But while the number of claims has dropped, the size of each claim has continued to increase. In 1985, the average cost per claim for the same insurer was $28,300. By June 1989, the average cost had risen to $36,900.

Overall operating results for the medical malpractice insurance industry have improved significantly, according to A.M. Best. The year 1988 marked the first time the medical malpractice combined ratio had fallen below 120 since 1979.

Seventy-five percent of physicians responding to a recent survey say that fear of malpractice lawsuits causes them to order more clinical tests than they may believe are necessary. According to a recent Gallup Organization poll of 1,000 physicians, sponsored by the American Medical Association, fear of litigation also has led some doctors to stop treating high-risk or indigent patients. In a companion public opinion poll, 61 percent of those questioned responded that "doctors do too many tests because of the fear of malpractice suits."

Other findings from the two Gallup polls show that 48 percent of the public believe that "people who sue physicians for malpractice are just looking for an easy way to make money;" 54 percent of the public think that malpractice awards by juries are too high; and 62 percent of the public support capping pain and suffering awards.

The Civil Justice System

The insurance liability crisis of the mid-1980s—the rising cost of liability insurance and, in some cases, the difficulty of obtaining it—drew attention to the need to reform the civil justice system, in particular, the tort system which deals with liability suits. In addition, the cost of bringing a lawsuit and the time it takes to dispose of it have stimulated interest in alternatives to resolving disputes through the traditional judicial process.

These alternative dispute resolution programs (ADRs) together with the legislative measures that have been enacted by many states (and that are being considered by others) in the area of tort reform are expected to produce significant benefits. These include a reduction in the cost of getting compensation monies into the hands of plaintiffs, a better balance between the rights of plaintiffs and the rights of defendants, and an environment in which businesses and their insurers can more easily predict future liabilities.

Insurance industry trade associations have joined with members of the business community throughout the United States to press for reforms in two major areas: court procedures that would reduce the expense and delays in settling claims; and tort law changes that would restore a measure of balance to the tort system. These include: abolition of joint and several liability; modification of the collateral source rule; and limitation on punitive damages or reinstitution of the state-of-the-art defense; and caps on noneconomic damages. In 1986 and 1987, 33 states enacted tort reform legislation incorporating at least one of these measures, and an additional nine did so in 1988 and 1989.

Tort reform has resulted in large consumer savings, according to findings of a recent study by two professors at the Kennedy School at Harvard University. After studying the impact of state tort reform on insurance losses and premiums in the areas of auto, medical malpractice and general liability, the researchers found that without state tort reform, insurance losses would have been $2.6 billion higher over the period 1985-1986.

In the area of general liability, joint and several liability reform and limits on damages had the greatest impact, reducing damages by 20 to 30 percent. Medical malpractice reforms produced a 19 percent reduction in losses. A lesser impact was felt in the auto insurance area – a 1.6 percent reduction in losses resulted from reforms.

Many trade groups and broad-based coalitions across the nation are working for tort reform. Among the largest and most influential is the American Tort Reform Association (ATRA), whose efforts are endorsed by 400 nonprofit organizations, professional societies, trade associations and large and small businesses representing over 30 million people nationwide.

Many of the reforms supported by ATRA, the insurance industry and other groups are opposed by trial lawyers.

Contracts usually require insurance companies to defend their policyholders in court. A 1989 study by Insurance Services Office, Inc. (ISO) shows that casualty insurers' legal defense costs rose 45 percent faster than the costs of actual compensation from 1978 to 1988. Legal defense costs for all casualty lines of insurance totaled $12 billion in 1988, while insured losses for the same lines were $95 billion, according to the report. Legal defense costs were 13.9 percent of losses in 1988, up from 9.6 percent of losses in 1978.

Tort reform is not the only way to reduce the cost of resolving disputes. A steadily increasing number of legal experts in insurance companies and in the business community at large believe that in certain cases disagreement among parties can be settled as effectively, and at a lower cost in terms of time and money, through techniques that bypass the traditional court system.

Based on arbitration or negotiation, these have become known as alternative dispute resolution mechanisms or ADRs. There are at least 350 ADR programs operating in 46 states, and 25 states have enacted legislation to encourage the use of ADR techniques.

Arbitration Forums Inc. (AF), a national nonprofit arbitration/mediation organization, processed more than 250,000 cases in 1989, representing nearly $750 million in claims. Claims of more than $620 million were handled in 1988. AF's consumer arbitration program, the Accident Arbitration/Mediation Forum, is operating in 36 states.

Tort Reform Provisions

The following table summarizes recent tort reform legislation. The column headings are explained in the same order they appear in the table.

Joint & Several Liability: A rule under which defendants minimally responsible for injury may be liable for the full amount of the damages. Reform measures may completely eliminate the rule or modify it by limiting its application. Many states now forbid application of the rule to noneconomic damages. The measure may apply to all tort actions or to one specific type, or it may exclude one or more key areas in which the rule is commonly applied.

Punitive Damages: Originally designed to punish defendants who showed a wanton disregard for safety, punitive damages may now be imposed in a wide variety of cases and may substantially exceed compensatory damages. Reforms may require punitive damage awards to be paid to the state; set limits on the size of the award or the size relative to compensatory damages; limit the type of case in which they may be awarded; or require hearings to establish a case for punitive damages before they may be sought in court.

Periodic Payments: In most cases, judgments are lump-sum awards. Under a periodic payment (or structured settlement) system, payments are made over the lifetime of the plaintiff or for the period of disability. Periodic payments are most frequently permitted or required when damages exceed a certain amount.

Contingent Fee Regulation: Plaintiff attorneys' fees in liability cases are commonly paid on a contingency basis—the attorney receives a percentage (commonly 30 to 50 percent) of any final award or settlement. Reform may impose a sliding scale of percentages

TORT REFORM MEASURES ENACTED BY

State	Joint & several liability	Punitive damages	Periodic payments	Contingent fees	Frivolous suits & defenses	Collateral source rule	Government liability	Dram shop liability
Ala.		X	X		X	X		
Alaska	X	X	X			X		
Ariz.	X	X					X	X
Ark.							X	
Calif.	X	X	X[2]			X[3]	X	
Colo.	X	X	M	X	X	X	X	X
Conn.	X[5]		X	X	X	X	X	
Del.								
D.C.								
Fla.	X[6]	X	X		X	X		
Ga.	X	X[8,9]			X	X	X	X
Hawaii[10]	X	X		X	X	X	X	
Idaho	X	X	X		X	X		X
Ill.	X	X			X	X	X	
Ind.					X	X	X	X
Iowa	X	X	X		X	X	X	X
Kans.		X	M	M		X	X	
Ky.	X	X			X	X		X
La.	X				X			
Maine			M	M			X	X
Md.			X			M	X	
Mass.			M	M		M		
Mich.	X		X		X	X	X	X
Minn.	X	X	X		X	X	X	
Miss.	X				X		X	X
Mo.	X	X	M			X		
Mont.[14]	X	X	X[15]			X	X	
Neb.					X		X	
Nev.	X[16]	X						

X: Indicates that a tort reform measure was enacted, but does not indicate the effectiveness or desirability of that change. M: Applies to medical malpractice only.

[1] Including punitive damages where applicable. [2] Only for government entities. [3] Only public entities. [4] Damages up to $500,000 at court's discretion. [5] Legislation in May 1987 restored joint and several liability to economic damages. [6] For cases with damages exceeding $25,000. [7] $250,000 applicable to arbitrated

based on the size of the award or require court approval of fees above a certain amount, or mandate a flat percentage of the amount actually recovered by the plaintiff .

Frivolous Suit Penalties: Refers to measures to deter frivolous claims and defenses. These laws generally provide that a party found to have acted frivolously in filing or defending a suit

STATES, 1985 THROUGH JUNE 30, 1990

Noneconomic damages cap	Remarks	State
$500,000 (M)[1]	D&O reform.	Ala.
$500,000	No damage cap for badly impaired; nonprofit D&O reform; prejudgment interest principle	Alaska
		Ariz.
		Ark.
	Product liability reform; D&O reform	Calif.
$250,000[4]	Nonprofit D&O reform; $1 million cap on damages except for physical impairment or disfigurement	Colo.
		Conn.
	Corporate D&O reform; product liability reform	Del.
		D.C.
$350,000(M)[7]	No fault compensation fund for brain-damaged infants	Fla.
	Govt. suits up to insurance coverage only; nonprofit D&O, product liability reform	Ga.
$375,000	Arbitration authorized for claims under $150,000; joint & several measure excludes product, auto accident, & environment suits	Hawaii
$400,000[11]	Nonprofit D&O reform	Idaho
	Product liability reform; joint & several liability measure excludes product, medical malpractice, and environmental liabilities	Ill.
	Nonprofit D&O reform	Ind.
	Product liability reform	Iowa
$250,000[12]	Product liability, D&O reform, general $250,000 cap on noneconomic damages, including medical malpractice	Kan.
		Ky.
	Product liability reform	La.
	Periodic payments on non-medical malpractice verdicts over $250,000	Maine
$350,000	Nonprofit D&O reform; damages cap excludes punitive damages	Md.
$500,000(M)	Exceptions to malpractice cap	Mass.
$225,000(M)	Exceptions to malpractice cap; product liability exception to joint and sev. liability measure; prejudgment interest lowered	Mich.
$400,000[13]	Nonprofit D&O reform; prejudgment interest restricted	Minn.
	Sovereign immunity reinstated	Miss.
$350,000(M)	Product liability reform	Mo.
	Product liability reform	Mont.
	Reduced prejudgment interest	Neb.
		Nev.

cases. [8]Some sunset provisions. [9]May be awarded only once for each act or omission, regardless of the number of cases arising from the act or omission. [10]$250,000 cap excludes intentional tort and product liability. [11]Subject to sunset provisions. [12]Pain and suffering damages only, not applicable to actions based on medical malpractice liability. [13]Excludes pain and suffering, disability or disfigurement. [14]Montana Supreme Court ruling may nullify some measures. [15]Optional for judgments over $100,000. [16]Major exceptions.

(Table continues)

may be liable for payment of the other party's reasonable fees and court costs.

Collateral Source Rule: A rule of evidence that bars the introduction of any information that a plaintiff's loss has been compensated by any source other than the defendant. Reform legislation may permit consideration of payments received from some or all collateral sources, require that any award be offset by the amount of those payments, or allow the defendant to introduce evidence of other compensation of the plaintiff. The jury is instructed to reduce any award for economic loss accordingly.

Government Liability: These measures limit the liability of government entities, usually by limiting or eliminating liability for government employees and boards, or for groups under contract to the government. Other measures restrict the application of the joint and several liability rule in cases involving

State	Joint & several liability	Punitive damages	Periodic payments	Contingent fees	Frivolous suits & defenses	Collateral source rule	Government liability	Dram shop liability
N.H.	X	X		X	X		X	X
N.J.	X	X			X	X		X
N.M.	X			WC				X
N.Y.	X		X		X	X	X	
N.C.					X			
N.D.	X	X	X		X	X	X	X[17]
Ohio	X	X	X	X	X	X	X	
Okla.		X			X			
Ore.	X	X		X	X	X	X	X
Pa.								
R.I.			X		X	M	X	
S.C.	X	X			X		X	
S.D.	X	X	M				X	
Tenn.						X	X	
Texas	X	X			X		X	X
Utah	X	X	M		X		X	X
Vt.	X							X
Va.		X			X		X	
Wash.	X		X	X[19]	X		WC	X
W. Va.	M				M		X	
Wis.				M				
Wyo.	X				X		X	X

X: Indicates that a tort reform measure was enacted, but does not indicate the effectiveness or desirability of that change. M: Applies to medical malpractice only. WC: Applies to workers' compensation.
[17] Some measures subject to sunset provisions. [18] Includes economic damages.

a government.

Dram Shop Liability: These measures generally limit the liability of sellers of liquor in dram shop actions by requiring proof of the seller's negligence or illegal serving of liquor. Some states have put caps on dram shop damages.

Noneconomic Damages Cap: A law lowering the liability of defendants by limiting recovery of a particular type of damages (usually noneconomic damages, such as pain and suffering); by limiting the total amount of damages recoverable; or by placing an absolute cap on liability. Caps may apply to all tort suits or only to specific types.

State-of-the-Art Defense: (in the text, not the column heads): A court ordered or legislated provision which allows a defendant to show that it provided goods or services in accordance with the state of scientific and technological knowledge of the time or in compliance with government or industry standards.

Noneconomic damages cap	Remarks	State
$875,000	Nonprofit D&O reform; state-of-the-art, prevailing knowledge defense allowed in product liability suits	N.H.
	Product liability reform	N.J.
	Nonprofit D&O reform	N.M.
	Nonprofit D&O reform; some exceptions to joint and several measure	N.Y.
		N.C.
	Product liability reform	N.D.
X	Periodic payments allowed for $250,000 judgments	Ohio
	Prejudgment interest rate lowered	Okla.
$500,000	Product liability reform; punitive damages	Ore.
		Pa.
		R.I.
		S.C.
$1,000,000(M)[18]		S.D.
	Nonprofit D&O reform	Tenn.
	Product liability reform	Texas
$250,000(M)	Damages cap excludes punitive damages; limited state-of-the-art defense permitted	Utah
		Vt.
	Tort claims act extended to transportation districts; D&O reform; compensation fund for severely brain-damaged infants	Va.
X	Damage caps based on life expectancy and wages	Wash.
$1,000,000(M)		W.Va.
$1,000,000(M)		Wis.
	Nonprofit D&O reform	Wyo.

[19] Court has right to review legal fees for propriety.

Source: Compiled by Insurance Information Institute based on data from trade associations and other groups.

CHAPTER 6

Losses by Category

Fire Losses

A fire department responds to a fire somewhere in the United States every 15 seconds. A structural fire occurs at the rate of one every 45 seconds; a residential fire every 60 seconds.

Fire losses in the United States increased in 1989 to a record $10.2 billion from the 1988 total of $9.6 billion. The per capita fire loss rose to $41.13 from the 1988 figure of $39.11.

Numbers of fires in 1989 were down, however, from 1988: a decrease of 13.2 percent in overall fires; 7.7 percent in structural fires; 8.8 percent in vehicle fires; and 18.3 percent in outside properties.

U.S. FIRE LOSSES, 1880-1989*

Year	Property loss	Loss per capita	Year	Property loss	Loss per capita
1880	$74,643,000	$1.49	1980	$5,579,000,000	$24.56
1890	108,994,000	1.73	1981	5,625,000,000	24.53
1900	160,930,000	2.12	1982	5,894,000,000	25.61
1910	214,003,000	2.32	1983	6,320,000,000	27.20
1920	447,887,000	4.21	1984	7,601,701,000	32.35
1930	501,981,000	4.08	1985	7,752,525,000	32.70
1940	286,491,000	2.16	1986	8,488,000,000	35.21
1950	648,909,000	4.27	1987	8,504,166,000	34.96
1960	1,107,824,000	6.16	1988	9,626,397,000	39.11
1970	2,238,000,000	11.41	1989	10,210,484,000	41.13

*Including allowances for uninsured and unreported losses.
Source: Insurance Services Office; per capita loss figures from Insurance Information Institute.

Fire Fatalities

About 5,400 civilians died as a result of fire in the United States in 1989, according to estimates the National Fire Protection Association (NFPA) received from fire departments responding to its annual survey. This is a highly significant decrease of 13.0 percent from the 1988 overall fire death number.

The major part of this year's decrease was a drop (12.5 percent) in deaths in residential fires. Whether this signals the start of a downward trend or is just an unusually good year, only time will tell. But with home fire deaths still accounting for 80 percent of all fire deaths, fire safety initiatives remain imperative.

The very young and those over 64 remain the most subject to death in fires, not only because they are less able to help themselves, but also because their lungs are more easily damaged by smoke inhalation.

Rates shown are from deaths from burns and asphyxiation, and from being struck by falling objects during fires.

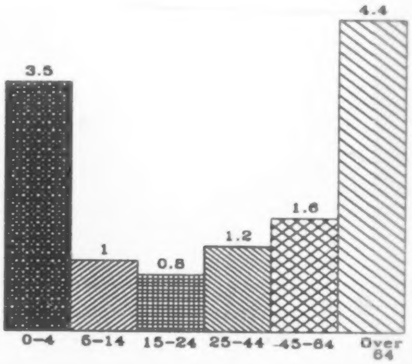
FIRE DEATH RATES BY AGE GROUP

Deaths per 100,000 Population 1980-1989

Year	0–4	5–14	15–24	25–44	45–64	Over 64
1980	5.1	1.4	1.3	1.6	2.8	6.5
1981	5.1	1.4	1.2	1.5	2.7	6.3
1982	4.5	1.4	1.1	1.4	2.3	5.6
1983	4.3	1.2	1.0	1.4	2.2	5.4
1984	4.2	1.4	1.1	1.4	2.1	5.1
1985	4.0	1.3	1.0	1.3	2.2	5.2
1986	4.2	1.3	1.0	1.3	1.9	4.8
1987	4.5	1.2	0.9	1.2	1.8	4.8
1988	4.6	1.2	0.8	1.1	1.7	4.8
1989	3.5	1.0	0.8	1.2	1.6	4.4

Source: National Safety Council.

Deaths per 100,000 Population by Age Group, 1989



Leading Causes of Fires

Defects in, or mishandling of, heating equipment cause more residential fires than any other known cause, while cooking–related fires are the second leading cause of such fires and the leading cause of injury from fires in the home.

Careless smoking is the leading known cause of residential fire deaths.

Arson is the known cause of nearly one of every four fires in nonresidential structures, including schools and restaurants. Arson is also the largest known cause of monetary loss and death.

Fires of unknown cause lead all other fires in deaths and monetary loss. One explanation for this is that major fires, which are most likely to cause death and major monetary loss, are also more likely to destroy any evidence of their origins.

CAUSES OF REPORTED FIRES, 1988

	Residential				Non-residential			
Cause	**Fires**	**Deaths**	**Injuries**	**$ loss**	**Fires**	**Deaths**	**Injuries**	**$ loss**
Incendiary/suspicious	11.1%	11.5%	9.6%	16.2%	24.3%	12.0%	14.2%	23.0%
Children playing	4.2	7.1	9.2	16.2	3.1	0.9	2.2	0.6
Smoking	6.1	20.2	13.3	5.4	5.0	15.4	9.0	2.0
Heating	19.1	10.6	11.1	13.3	5.6	6.0	7.2	4.0
Cooking	17.5	5.6	19.6	7.6	5.9	4.3	8.1	2.4
Electrical distribution	7.5	5.1	6.0	11.3	9.2	7.7	9.2	9.7
Appliances, A/C	5.9	2.4	3.8	4.4	1.2	0.9	5.8	2.4

(Table continues)

	Residential				Non-residential			
Cause	**Fires**	**Deaths**	**Injuries**	**$ loss**	**Fires**	**Deaths**	**Injuries**	**$ loss**
Open flame, ember	5.3	3.5	5.7	4.3	9.8	10.3	11.2	5.4
Other heat, spark	1.2	1.0	1.2	1.3	1.6	3.4	2.2	1.0
Other equipment	7.8	4.6	6.6	7.2	10.3	17.1	16.5	9.2
Natural causes	1.5	0.2	6.6	1.9	3.0	0.9	2.6	3.5
Exposure	3.5	0.5	0.6	4.2	6.5	2.6	1.2	4.3
Unknown	12.8	9.2	27.8	18.9	14.7	18.6	10.6	32.6

NOTE: Columns of figures may not add to 100 percent because of the effects of rounding.
Source: U.S. Fire Administration, Federal Emergency Management Agency.

Arson

Fires suspected or known to have been deliberately set decreased 2.5% from a year ago. These fires took the lives of 615 civilians and resulted in some 20.7% of all structural property loss and $1.558 billion in property damage. The average loss per incendiary or suspicious structure fire ($16,062) was virtually unchanged from last year.

Vehicle fires of incendiary or suspicious origin decreased 13.2% from 1988. Their estimated property damage ($139 million) decreased 7.9% from the year before.

A leading cause of arson appears to be vandalism. The majority of those arrested for arson are young. Only about 14 percent of arson suspects are said to be motivated by a desire to defraud. However, as the economy deteriorates in specific areas of the country, insurance fraud arson tends to increase.

INCENDIARY AND SUSPICIOUS FIRES IN STRUCTURES, 1989

	Fires		Civilian deaths		Dollar loss*	
	Estimate	Change from 1988	Estimate	Change from 1988	Estimate *($1,000)*	Change from 1988
Structural fires of incendiary origin	59,500	-5.6%	460	-19.3%	$1,057,000	+3.4%
Structural fires of suspicious origin	37,500	+2.7	155	-8.8	501,000	-12.4
Totals	**97,000**	**-2.5**	**615**	**-16.9**	**$1,558,000**	**-2.3**

* Includes direct property losses only; does not include indirect losses such as business interruption or temporary shelter costs. No adjustment was made for inflation in the year-to-year comparisons.
Source: National Fire Protection Association estimates.

Structural Fires

The estimated 688,000 structural fires in 1989 were down a significant 7.7% from the 1988 total of 745,000. This correlates with a similar downward trend during most of the 1980s for total fires, according to the National Fire Protection Association.

Residential fires accounted for 74.6%

of structure fires, a decrease of 7.1% from last year. While residential fires in one- and two-family dwellings accounted for 58.5% of all structure fires, this was a significant decrease (6.9%) from 1988.

Fires in structures resulted in an estimated $7.5 billion in property damage in 1989, an increase of 4.6% from 1988. This figure, however, reflects one industrial fire resulting in $750 million in damages.

Average loss per structure fire was $10,927, up 13.3% from the previous year.

STRUCTURAL FIRES BY TYPE OF USE, 1989*

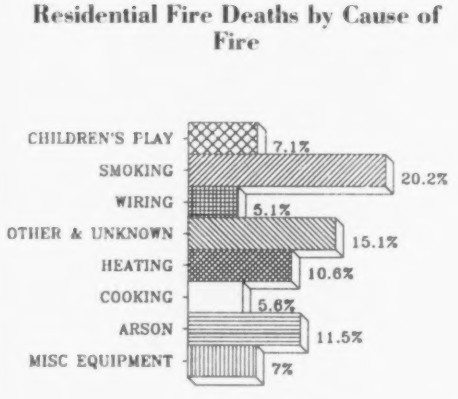
Property use	**Estimated number of fires**	**% change from 1988**	**% of structural fires**	**% of dollar losses****
Public assembly	17,500	-12.5	2.7	4.2
Educational	9,000	-10.0	1.3	1.6
Institutional	12,500	-10.7	1.9	0.3
Residential	513,500	-7.1	74.2	56.5
One- and two-family dwellings***	402,500			
Apartments	96,000			
Hotels and motels	6,500			
Other	8,500			
Stores and offices	34,500	-9.2	5.1	10.5
Industry, utility, defense	24,500	-9.3	3.6	15.2
Storage in structures	44,500	-11.0	6.7	10.3
Special structures	32,000	-4.5	4.5	2.4
Total	**688,000**	**-7.7**		

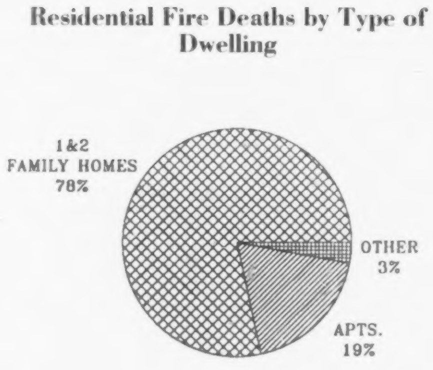
*Estimates based on data reported to the National Fire Protection Association by fire departments responding to the 1989 National Fire Experience Survey. **Direct property losses only. ***Includes mobile homes.
Source: National Fire Protection Association estimates.

CIVILIAN FIRE DEATHS AND INJURIES BY PROPERTY USE, 1989

Property use	**Deaths**	**% change from 1988**	**% of all civilian fire deaths**	**Civilian fire injuries**
Residential	4,435	-12.4	82.0	20,750
One- and two-family dwellings*	3,545	-14.1	65.5	15,225
Apartments	790	-4.8	14.6	5,050
Hotels and motels	35	-22.2	0.7	300
Other residential	65	0.0	1.2	175
Non-residential structures	220	+2.3	4.1	3,275
Highway vehicles	560	-30.0	10.3	2,750
Other vehicles**	125	+92.3	2.3	275
All other fires, incl. nonstructural	70	0.0	1.3	1,200
Total	**5,410**	**-13.0**	**100.0**	**28,250**

*Includes mobile homes. **Includes trains, boats, ships, aircraft, farm vehicles and construction vehicles.
Source: National Fire Protection Association estimates.





Multiple Death Fires

On October 23, 1989 a series of explosions and fires at a petrochemical plant in Texas killed 23 people, injured 130 more, and devastated the property. In terms of lives lost, the incident ranks as one of the largest post-war industrial accidents at an oil refinery or petrochemical plant in the United States. In residential fires, the largest death loss was of 16 people in a high-rise building housing older adults.

In 1989, there were 43 residential fires that killed at least five people each, the National Fire Protection Association reported, and 26 fires that killed more than three people in non-residential structures and outside of structures entirely. These 69 fires account for 429 deaths, or 7.2 percent of the typical fire death toll in recent years.

In recorded history, 24 fires in the United States have killed 100 or more persons each, including three which claimed more than 1,000 lives each. The most tragic multiple-death fire in recent years occurred May 28, 1977, when 165 people died in a supper club fire in Southgate, Ky.

THE MOST TRAGIC MULTIPLE-DEATH FIRES OF 1989

Date	Location	Item burned	Deaths
Oct. 23	Texas	Petrochemical plant	23
Dec. 24	Tenn.	Housing for older adults	16
Oct. 5	Va.	Nursing home	12
Sept. 13	Ky.	Coal mine	10
Jan. 1	Minn.	Single-family dwelling	10
Apr. 11	Ill.	Two-family dwelling	9
Nov. 18	N.C.	Mobile home	9
Jan. 15	N.Y.	Nine unit rooming house	8
Feb. 11	Ark.	Single-family dwelling	8

Source: National Fire Protection Association.

THE 10 WORST MULTIPLE-DEATH FIRES IN THE UNITED STATES

Date	Place	Deaths
April 27, 1865	Lower Mississippi River, SS Sultana	1,547
Oct. 8, 1871	Great Chicago fire	1,152
June 15, 1904	New York, N.Y., SS General Slocum	1,030
Dec. 30, 1903	Chicago, Ill., Iroquois Theater	602
Oct. 12, 1918	Cloquet, Minn., and environs	559
April 18, 1906	San Francisco, Calif., earthquake and fire	500
Nov. 28, 1942	Boston, Mass., Cocoanut Grove Night Club	492
April 16, 1947	Texas City, Tex., SS Grand and Monsanto Chemical Co.	468
Sept. 1, 1894	Hinckley, Minn., and environs	413
June 30, 1900	Hoboken, N.J., North German Lloyd pier and ships	326

Source: Compiled by the Insurance Information Institute.

Large-Loss Fires

Fifty-four fires causing damage of $5 million or more occurred in 1988, collectively accounting for $1,141,569,000 in direct property damage. The fires also resulted in 14 civilian fatalities, 496 civilian injuries, 326 fire fighter injuries, and one fire fighter fatality.

Although these fires represented only 0.002 percent of all the fires estimated to have occurred in the United States during 1988, they accounted for 13.8 percent of all estimated dollar loss, according to the National Fire Protection Association (NFPA). While this percentage is roughly the same as in 1987 (when the NFPA first began to use $5 million rather than $1 million as the large-loss threshold), it represents a constant percentage of a much larger total. Direct property damage from fires in 1988 increased 16.7 percent, with 6.1 percent of this increase attributable to just three large loss fires which totaled an estimated $513 million.

The two largest-loss fires of 1988 were manufacturing and industrial properties and involved explosions. The largest single loss was $330 million at a petroleum refinery in Norco, La. The direct property loss was estimated at $288 million, with property loss outside the plant (directly related to the explosions and fire) expected to exceed $42 million. This fire resulted in seven civilian fatalities and 48 civilian injuries. After adjusting for inflation, this ranks as one of the largest fire losses in U.S. history. The 19 fires in 1988 involving manufacturing and industry property included seven of the 10 largest loss fires for that year.

THE 10 LARGEST-LOSS FIRES OF 1988

State	Property use	Esimated loss
Louisiana	Petroleum refinery	$330,000,000
Nevada	Hazardous chemical manufacturing plant	103,000,000
California	General item warehouse	80,000,000
California	High-rise bank office building	50,000,000
Illinois	Telephone switching station	50,000,000

(Table continues)

State	Property use	Esimated loss
California	Forest with logging operations	45,000,000
California	Aircraft hanger and complex	41,500,000
Oregon	Forest with logging operations	30,000,000
California	Forest without logging operations	23,000,000
Florida	Electric power plant	20,000,000

Source: National Fire Protection Association.

THE 10 LARGEST-LOSS FIRES IN U.S. HISTORY

($ millions)

		Estimated loss	
Date	**Location**	**When occurred**	**In 1988 dollars***
April 18, 1906	San Francisco earthquake and fire	$350	$4,590
Oct. 8, 1871	Great Chicago fire	168	1,652
Nov. 9, 1872	Great Boston fire	75	738
Feb. 7, 1904	Baltimore conflagration	50	656
Feb. 9, 1942	S.S. Normandie oceanliner	53	384
April 16, 1947	S.S. Grand and Monsanto Chemical Company plant	67	355
May 5, 1988	Petroleum refinery, Norco, Louisiana	330	330
Dec. 16, 1835	Great New York fire of 1835	26	297
Oct. 12, 1918	Forest fires in northern Minnesota	35	274
Jan. 27, 1967	Apollo spacecraft cabin fire, Cape Kennedy, Florida	75	265

* All loss estimates are from the *1984 Fire Almanac* except the May 5, 1988, Louisiana refinery fire. Adjustment to 1988 dollars is done using the Consumer Price Index, including the U.S. Census Bureau's estimates of the index for historical times. The list is limited to fires for which some reliable dollar-loss estimate exists and is limited to fires occurring in or over the United States.

Source: National Fire Protection Association.

The Catastrophe Record, 1989

Two major catastrophes, occurring within one month of each other (Hurricane Hugo and the San Francisco or Loma Prieta earthquake) caused large property losses and consequent insurance payouts. The 34 catastrophes occurring in 1989 resulted in insured losses of $7,642,000,000, making it the most costly year since such records have been kept.

A catastrophe, in the language of the insurance industry, is an event in which the insured loss appears likely to exceed $5 million. Aside from the two major 1989 catastrophes just mentioned, severe losses most often are the result of windstorms, freezing, or other nature-related cause. Damages from a fire or explosion also can reach catastrophic proportions.

Hurricane Hugo, striking the U.S. Virgin Islands, the Commonwealth of Puerto Rico, and the states of South Carolina, North Carolina, Georgia and Virginia, during the period of September 17 to 22, resulted in total estimated insured loss payments of $4,195,000,000.

THE CATASTROPHE RECORD, 1989

Date	States	Catastrophe	Estimated loss payment
Jan. 7	IL, IN, KY	Wind, hail, tornadoes	$22,000,000
Jan. 18-30	AK	Wind, ice, freezing	100,000,000
Jan. 31-Feb. 8	WA, OR, CA, MT, WY, CO, OK, TX		
Feb. 20-21	MS, NC	Wind, hail, tornadoes	15,000,000
Mar. 4-6	AR, MS, AL, GA	Wind, hail, tornadoes, flooding, snow, ice	25,000,000
Apr. 3-5	AR, MO, IL, IN, AL, GA, SC	Wind, hail, tornadoes, flooding	95,000,000
Apr. 25-27	IA, IN, OH, WV, NC, NE	Wind, hail, tornadoes, flooding	60,000,000
Apr. 25-26	OK	Wind, hail, tornadoes	15,000,000
Apr. 28-30	TX, AR	Wind, hail, tornadoes	95,000,000
May 1	TX	Wind, hail	30,000,000
May 3-6	OK, TX, LA, MS, GA, SC, NC, VA	Wind, hail, tornadoes, flooding	380,000,000
May 11	NM	Wind, hail, tornadoes	20,000,000
May 13-19	TX, OK, LA	Wind, hail, tornadoes, flooding	120,000,000
May 21-22	KS, MO, OK, AR	Wind, hail, tornadoes, flooding	15,000,000
May 22-23	NE, IA	Wind, hail, tornadoes	10,000,000
May 24-26	IA, MO, WI, IL, IN, OH	Wind, hail, tornadoes, flooding	100,000,000
May 27	TX, NM	Wind, hail	18,000,000
June 2	TX	Wind, hail, tornadoes	15,000,000
June 3-4	TX, OK	Wind, hail, tornadoes, flooding	30,000,000
June 6-9	TX, OK, LA, MS, AL, FL	Wind, hail, tornadoes, flooding	115,000,000
June 10-11	NM, TX	Wind, hail, tornadoes	25,000,000
June 14-16	VA, MD, NC, SC	Wind, hail	60,000,000
June 25-27	TX, LA	Tropical storm Allison, wind, tornadoes, flooding	45,000,000
July 2-3	OK, TX, LA	Wind, hail, tornadoes, flooding	45,000,000
July 10	NY, CT, NJ	Wind, hail, tornadoes	92,000,000
Aug. 1-2	TX	Hurricane Chantal, wind, tornadoes, flooding	40,000,000
Aug. 21	NE	Wind, hail	15,000,000
Sept. 12	NM	Wind, hail	50,000,000
Sept. 17-18, 21-22	U.S. Virgin Islands, Puerto Rico, GA, SC, NC, VA	Hurricane Hugo, wind, flooding, tornadoes	4,195,000,000
Oct. 15-16	TX	Hurricane Jerry, wind, tornadoes, flooding	35,000,000
Oct. 17	CA	Earthquake	600,000,000
Nov. 7-8	LA, MS, AL	Wind, hail, tornadoes, flooding	20,000,000

(Table continues)

Date	States	Catastrophe	Estimated loss payment
Nov. 15-16	IL, IN, AR, LA, MS, AL, GA, SC, KY, VA, MD, DE, PA, NJ, NY, CT	Wind, hail, tornadoes, flooding	225,000,000
Nov. 20-21	NY, PA, CT, NJ, MD, DE	Wind	55,000,000
Dec. 21-26	TX, LA, MS, AL, GA, FL, OK, AR, TN, KY, SC, NC, VA, MO, IL, IN, OH, WV, PE, NY, CT	Freezing, ice, snow	500,000,000

Source: Property Claim Services Division, American Insurance Services Group, Inc.

Catastrophes during the Last Decade

Major catastrophic losses in the United States are largely associated with hurricanes. However, 1989 included not only Hurricane Hugo—the largest insured property loss in recorded United States history, but the Loma Prieta earthquake, the largest recorded earthquake property loss.

Hurricane Hugo resulted in insured property damage of $4.195 billion, the costliest catastrophe in United States history. The Loma Prieta earthquake (more commonly known as the "second San Francisco earthquake") caused insured property damage of approximately $600 million.

THE CATASTROPHE RECORD, 1980-1989

	Number of catastrophes				
Year	Natural	Other	Total	Largest single loss	Total estimated loss payments
1980	46	5	51	$100,000,000	$1,177,022,900
1981	30	3	33	201,546,780	714,282,780
1982	30	3	33	243,500,000	1,528,419,850
1983	33	0	33	880,000,000	2,254,765,000
1984	26	0	26	276,700,000	1,548,500,000
1985	33	1	34	543,304,000	2,816,340,000
1986	26	0	26	82,000,000	871,516,250
1987	24	0	24	150,000,000	905,000,000
1988	31	1	32	130,000,000	1,409,000,000
1989	34	0	34	4,195,000,000	7,282,000,000
Total	**313**	**13**	**326**		**$20,506,846,780**

Compiled by Insurance Information Institute.

Hurricanes Reaching the United States

Hurricane Hugo, striking Puerto Rico and the U.S. Virgin Islands Sept. 17-18, and portions of South Carolina, North Carolina, Georgia and Virginia Sept. 21-22, ranks as the costliest hurricane in U.S. records. Insured property damage for the United States, Puerto Rico and the U.S. Virgin Islands has been estimated at $4.195 billion, according to the Property Claims Services Division of the American Insurance Services Group, Inc.

Estimated insured property damages for the affected areas are: South Carolina, $2.3 billion; North Carolina, $645 million; Georgia and Virginia (combined), $10 million; Virgin Islands, $800 million, and Puerto Rico, $440 million. Flood losses insured under the National Flood Insurance Program and by "Write-Your-Own" insurers exceeded an additional $273 million in all affected areas.

Hugo was a Category IV hurricane, with winds ranging from 131 to 150 mph. Since 1900, the U.S. has been hit by 14 Category IV and two Category V hurricanes (Camille and one known as the Key West Hurricane). Because Hugo came farther inland than most hurricanes and retained much of its power, its damages were magnified. For example, the land area swept by the storm covered 14,000 square miles in South Carolina alone—more than twice the area covered by the two most damaging Category IV hurricanes previously recorded (Frederic, which hit the East Coast in 1979, and Alicia, which ripped through Texas in 1983).

Insurers' handling of Hurricane Hugo got generally high marks. In South Carolina, the hardest-hit state, for example, a Department of Insurance study showed that 90 percent of individual claims had been settled by December 31st.

HURRICANES IN THE UNITED STATES, 1963-1989

Year	Hurricanes	Deaths*	Year	Hurricanes	Deaths*	Year	Hurricanes	Deaths*
1963	1	11	1972	1	121	1981	0	0
1964	4	49	1973	0	5	1982	0	3
1965	1	75	1974	1	1	1983	2	22
1966	2	54	1975	1	21	1984	5	4
1967	1	18	1976	1	9	1985	6	30
1968	1	9	1977	1	0	1986	4	9
1969	2	256	1978	0	35	1987	1	0
1970	1	11	1979	3	22	1988	2	1
1971	3	8	1980	1	2	1989	6	56

*Deaths include fatalities from high winds of less than hurricane force.

Source: Compiled by the Insurance Information Institute from data supplied by the National Oceanic and Atmospheric Administration and news reports.

THE 10 MOST COSTLY INSURED HURRICANES

Dates	Place	Hurricane	Estimated insured loss
1989, Sept. 17-22	U.S. Virgin Islands, Puerto Rico, Ga., S.C., N.C., Va.	Hugo	$4,195,000,000
1979, Sept. 12-14	Miss., Ala., Fla., La., Tenn., Ky., W. Va., Ohio, Pa., N.Y.	Frederic	$752,510,000
1965, Sept. 7-10	Fla., La., Miss.	Betsy	715,000,000*
1983, Aug. 17-20	Texas	Alicia	675,520,000

(Table continues)

Dates	Place	Hurricane	Estimated insured loss
1985, Aug. 30-Sept. 3	Fla., Ala., Miss., La.	Elena	543,304,000
1985, Sept. 26-27	N.C., Va., Md., Del., Pa., N.J., N.Y., Conn., R.I., Mass., N.H., Vt., Me.	Gloria	418,750,000
1970, Aug. 3	Southeastern Texas	Celia	309,950,000*
1969, Aug. [illegible]	La., Miss., Ala., Florida Panhandle	Camille	225,000,000*
1982, Nov. 23-24	Hawaii	Iwa	137,000,000
1954, Aug. 30-31	N.Y., Conn., R.I., Mass., Maine, N.H., N.J.	Carol	129,700,000*

*Fixed property loss.

Source: Compiled by Insurance Information Institute from estimates provided prior to 1984 by the American Insurance Association; from 1984 to date by the Property Claim Services Division of the American Insurance Services Group Inc.

Tornadoes in the United States

Tornadoes are the most violent of atmospheric storms with wind speeds generally approaching 300 miles an hour. The most devastating tornado killed 689 persons in Missouri, Illinois and Indiana on March 18, 1925. In 1989 more tornadoes (860) struck the United States than in any other year since 1984 (907). The 1989 tornadoes caused 49 deaths, a significantly lower number than the 122 fatalities caused by the tornadoes of 1984.

One reason for the drop in fatalities may be the advances in tornado detection and the extensive public information campaign undertaken in many states to educate people on how to protect themselves and their families when a tornado warning is sounded. However, some tornadoes give no warning before they strike.

TORNADOES IN THE UNITED STATES, 1964–1989

Year	Tornadoes	Deaths	Year	Tornadoes	Deaths	Year	Tornadoes	Deaths
1964	704	73	1973	1,102	87	1982	1,046	64
1965	906	299	1974	947	361	1983	931	34
1966	585	98	1975	920	60	1984	907	122
1967	926	114	1976	835	44	1985	684	94
1968	660	131	1977	852	43	1986	762	15
1969	608	66	1978	788	53	1987	656	59
1970	653	72	1979	852	84	1988	702	32
1971	888	156	1980	866	28	1989	860	49
1972	741	27	1981	783	24			

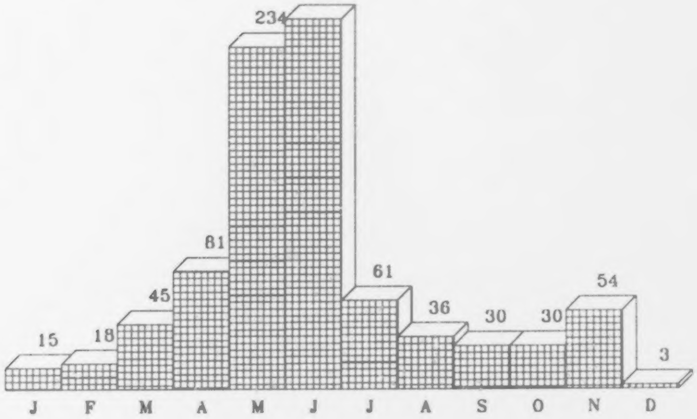
Source: National Climatic Data Center, NESDIS, NOAA, U.S. Department of Commerce.

TORNADO DEATHS AND INJURIES BY STATE, 1989

State	Tornadoes	Deaths	Injuries
Alabama	23	21	478
Alaska	0	0	0
Arizona	1	0	0
Arkansas	18	0	6
California	4	0	0
Colorado	22	0	0
Connecticut	3	0	114
Delaware	3	0	2
Dist. of Col.	0	0	0
Florida	68	3	8
Georgia	38	4	105
Hawaii	1	0	0
Idaho	2	0	0
Illinois	15	0	567
Indiana	26	0	19
Iowa	29	0	12
Kansas	31	0	1
Kentucky	18	0	5
Louisiana	45	2	104
Maine	1	0	0
Maryland	1	0	0
Massachusetts	7	0	1
Michigan	15	0	2
Minnesota	11	0	0
Mississippi	36	0	10
Missouri	13	0	0
Montana	6	0	0
Nebraska	41	0	0
Nevada	3	0	0
New Hampshire	0	0	0
New Jersey	17	0	2
New Mexico	16	0	0
New York	15	10	49
North Carolina	24	5	119
North Dakota	12	0	1
Ohio	17	0	16
Oklahoma	21	0	2
Oregon	2	0	0
Pennsylvania	11	0	13
Rhode Island	0	0	0
South Carolina	18	2	50
South Dakota	5	0	5
Tennessee	13	1	4
Texas	160	1	75
Utah	6	0	0
Vermont	1	0	0
Virginia	9	0	0
Washington	1	0	1
West Virginia	4	0	0
Wisconsin	17	0	4
Wyoming	10	0	0
Puerto Rico	0	0	0
Total	**860**	**49**	**1,772**

Source: National Climatic Data Center, NESDIS, NOAA, U.S. Department of Commerce.

NUMBER OF TORNADOES PER MONTH, 1989



Earthquakes in the United States

On October 17, 1989, an earthquake of magnitude 7.1 on the Richter scale occurred on the San Andreas fault 10 miles northeast of Santa Cruz, Calif. Officially designated the Loma Prieta earthquake, it is more commonly known as the second San Francisco earthquake. As such, it is the largest earthquake in the San Francisco Bay area since 1906, and the largest magnitude quake anywhere in California since 1952.

(The Richter scale measures the size or strength of an earthquake at its source or epicenter. Expressed in whole numbers and decimals, it is a logarithmic scale. A Richter 7 quake, for example, is 10 times greater than a Richter 6.)

Causing 67 deaths and about $7 billion worth of property damage, the Loma Prieta quake now ranks as the biggest dollar loss natural disaster in U.S. history. Insured property damage is estimated at $600 million. While under a California law in effect since January 1985, insurance companies must offer earthquake coverage to all homeowners and tenants (the law does not apply to commercial insurance), only about 20 percent of homes and a similar percent of businesses in the affected area had earthquake coverage.

While much of the nation's seismic activity is centered along the Pacific Coast and in Nevada and Alaska, every state is vulnerable to and has felt the effect of earthquakes. In the winter of 1811 and 1812, for example, three earthquakes, calculated to be 8.6, 8.4 and 8.7 on the Richter scale, struck near New Madrid, Mo., causing damage in an area 15 times greater than that of the comparably sized 1906 San Francisco quake. The eastern United States is potentially much more vulnerable to earthquake damage than the west coast, because of a denser population, buildings not designed to resist earthquakes, and businesses and individuals not prepared to deal with temblors.

THE 10 MOST COSTLY U.S. EARTHQUAKES*

Year	**Locality**	**Estimated property damage****
1989	San Francisco Bay area (Loma Prieta quake)	$7,000,000,000
1971	San Fernando, Calif.	553,000,000
1964	Alaska and west coast of United States (tsunami damage from earthquake near Anchorage, Alaska)	500,000,000
1987	Southern California; primarily in Los Angeles-Pasadena-Whittier area	358,000,000
1952	Kern County, Calif.	60,000,000
1933	Long Beach, Calif.	40,000,000
1983	Central California (Coalinga)	31,000,000
1979	Imperial County, Calif.	30,000,000
1946	Hawaii (tsunami damage from earthquake in Aleutians)	25,000,000
1949	Puget Sound, Wash.	25,000,000

*One of history's most catastrophic occurrences, the San Francisco earthquake-fire of 1906, caused direct quake losses of some $24 million, plus fire losses of $350 to $500 million, for a total loss in current dollars of nearly $6.0 billion.

** Property damage figures are given in dollar values for the year in which the earthquake occurred.

Source: National Geophysical Data Center, National Oceanic and Atmospheric Administration.

Motor Vehicle Accidents

Motor vehicle accidents are the fourth leading cause of death for all ages throughout the nation and account for more than 40 percent of deaths in the 16-to-22 age group. A motor vehicle death occurs on average once every 11 minutes and an injury every 18 seconds, according to the National Safety Council. The Insurance Information Institute estimates that there were 34.4 million motor vehicle accidents in 1989. The total cost of these accidents was about $94 billion. In 1989, the average bodily injury liability claim in an auto accident was $9,338, which represents a 162 percent increase over the 10-year period 1979-1989. The average property damage liability claim was $1,646 in 1989, a 130 percent increase over the same period.

MOTOR VEHICLE ACCIDENTS, 1989

Accidents*	34,440,000
Deaths**	46,900
Injuries*	5,560,000
Economic Loss***	$93,900,000,000

Sources: *Insurance Information Institute estimates; **National Safety Council; ***Insurance Information Institute estimate based on information from the National Center for Health Statistics, National Health Survey.

The insurance industry has long been one of the leading supporters of efforts to improve crash protection for automobile occupants and other aspects of highway safety. Along with the consumer, health and safety groups, the industry has been a force behind federal legislation passed in the 1980s which resulted in safety and occupant protection devices, such as automatic restraints (air bags or seat belts) and high rear-mounted brake lights being included as standard features in new vehicles. Truck safety measures have also been enacted.

In addition to saving lives and reducing the severity of injuries, improvements in automobile and highway safety lower the cost of insurance claims and, ultimately, the cost of auto insurance to drivers. However, some of the lives saved and injuries avoided by additional safety features may be offset by higher speed limits on certain roads and by increased consumer interest in faster, more powerful cars.

TRAFFIC DEATHS, 1980–1989

Year	Deaths	Annual % change	Death rate per 100 million vehicle miles	Death rate per 10,000 motor vehicles
1980	53,172	– 0.7	3.50	3.29
1981	51,385	– 3.4	3.30	3.13
1982	45,779	–10.9	2.88	2.77
1983	44,452	– 2.9	2.68	2.62
1984	46,263	+ 4.1	2.69	2.69
1985	45,901	– 0.8	2.59	2.59
1986	47,865	+ 4.3	2.60	2.63
1987	48,290	+ 0.9	2.51	2.63
1988	49,900	+ 1.3	2.41	2.59
1989	46,900	- 4.1	2.25	2.43

Source: National Safety Council.

Motor Vehicle Deaths by State

While California has by far the highest traffic fatality toll of any state, it is below average in mileage death rates (deaths per 100 million vehicle miles). In 1989, these mileage-death rates ranged from a high of 3.5 in New Mexico to a low of 1.4 in North Dakota.

MOTOR-VEHICLE DEATHS BY STATE, 1988-1989

	Number		Mileage rate*			Number		Mileage rate*	
State	**1989**	**1988**	**1989**	**1988**	**State**	**1989**	**1988**	**1989**	**1988**
Ala.	1,025	1,023	2.4	2.6	Mont.	181	198	2.3	2.4
Alaska	84	97	2.3	2.5	Neb.	296	261	2.2	1.9
Ariz.	884	944	2.6	2.8	Nev.	307	286	3.3	3.2
Ark.	648	610	3.3	3.2	N. H.	190	168	2.0	1.8
Calif.	5,105	5,381	2.1	2.2	N. J.	890	1,051	1.5	1.8
Colo.	522	497	1.9	1.8	N. M.	538	487	3.5	3.2
Conn.	406	486	1.6	1.9	N. Y.	2,239	2,237	2.1	2.2
Del.	118	165	1.8	2.6	N. C.	1,464	1,587	2.5	2.7
D. C.	75	63	2.2	1.9	N. D.	81	104	1.4	1.8
Fla.	3,016	3,090	2.8	2.9	Ohio	1,700	1,748	2.1	2.1
Ga.	1,632	1,660	2.5	2.7	Okla.	655	641	2.0	2.0
Hawaii	147	149	1.9	2.0	Ore.	630	677	2.5	2.7
Idaho	238	257	2.8	3.2	Pa.	1,877	1,932	2.3	2.4
Ill.	1,748	1,862	2.2	2.4	R. I.	100	125	1.7	2.1
Ind.	973	1,104	1.9	2.2	S. C.	996	1,033	3.2	3.3
Iowa	511	556	2.3	2.5	S. D.	151	147	2.3	2.2
Kan.	426	483	2.1	2.3	Tenn.	1,081	1,266	2.3	2.9
Ky.	782	840	2.4	2.7	Texas	3,361	3,395	2.2	2.2
La.	857	923	2.4	2.7	Utah	303	297	2.4	2.2
Maine	190	256	1.7	2.2	Vt.	116	128	2.1	2.3
Md.	750	794	2.0	2.1	Va.	999	1,069	1.7	1.9
Mass.	700	726	1.7	1.7	Wash.	781	785	1.8	1.9
Mich.	1,633	1,704	2.1	2.2	W. Va.	468	460	3.3	3.3
Minn.	605	615	1.6	1.7	Wis.	817	813	1.9	1.9
Miss.	728	720	3.3	3.3	Wyo.	127	155	2.3	2.7
Mo.	1,052	1,103	2.3	2.4	**Total**	**46,900**	**48,900**	**2.3**	**2.4**

*Deaths per 100 million vehicle miles.
Source: National Safety Council.

Accidents by Age of Drivers

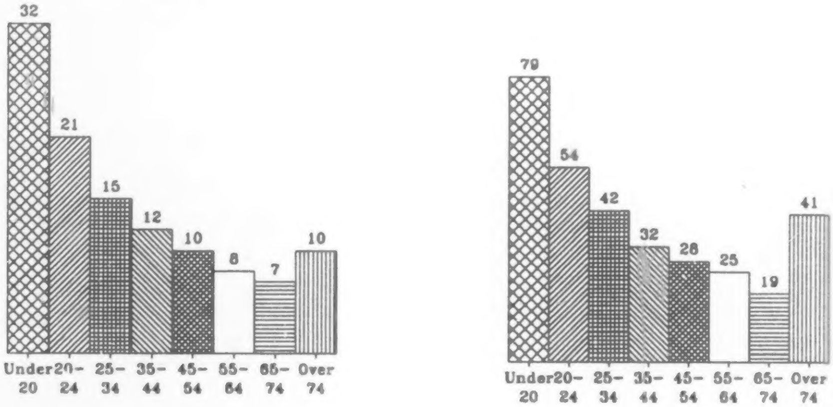
Drivers under the age of 20 accounted for 6.1 percent of all licensed drivers, but for 14.5 percent of all accidents and 12.9 percent of all fatal accidents. According to the National Safety Council, drivers in the age group 20-24 accounted for 10.4 percent of licensed drivers, but for 16.2 percent of all accidents and 15.1 percent of fatal accidents. The largest percentage of licensed drivers (24.9 percent) was in the 25 to 34 year age group. These drivers accounted for 28 percent each of the drivers involved in fatal and all motor-vehicle accidents.

ACCIDENTS BY AGE OF DRIVERS, 1989

Age group	Number of drivers	% of total	Drivers in fatal accidents	% of total	Drivers in all accidents	% of total
Under 20	10,100,000	6.1	8,000	12.9	3,300,000	14.5
20-24	17,200,000	10.4	9,300	15.1	3,700,000	16.2
25-34	41,100,000	24.9	17,300	28.0	6,300,000	27.6
35-44	34,100,000	20.7	10,800	17.5	4,100,000	18.0
45-54	22,500,000	13.7	6,300	10.2	2,200,000	9.7
55-64	18,900,000	11.5	4,700	7.6	1,500,000	6.6
65-74	14,700,000	8.9	2,800	4.5	1,100,000	4.8
Over 74	6,300,000	3.8	2,600	4.2	600,000	2.6
Totals	**164,900,000**	**100.0**	**61,800**	**100.0**	**22,800,000**	**100.0**

Source: National Safety Council.

DRIVER INVOLVEMENT RATES BY AGE GROUP



In All Accidents
Drivers in all accidents per 100 drivers in each age group.

In Fatal Accidents
Drivers in fatal accidents per 100,000 drivers in each age group.

Source: National Safety Council.

Sex of Drivers

Males comprised about 51.7 percent (some 85.2 million) and females 48.3 percent (79.7 million) of the nation's estimated 164.9 million licensed drivers in 1989. This ratio has remained roughly the same for several years. Males account for about 71 percent of the miles driven each year, according to the latest estimates from the National Safety Council (NSC).

However, male drivers were involved in some 30 percent more fatal accidents than female drivers. Female drivers, on the other hand, have a higher involvement rate for all accidents.

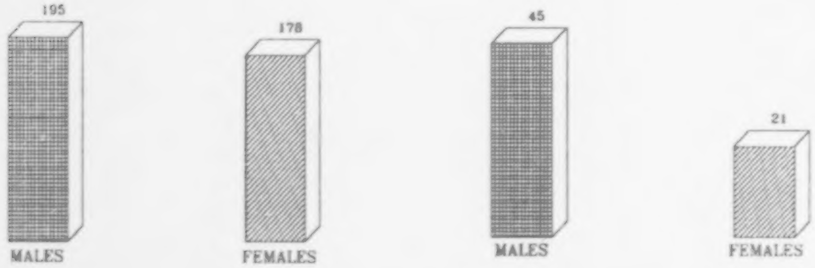
At least part of the difference in accident rates, the NSC says, may be due to the time, place, and circumstances of driving.

SEX OF DRIVERS INVOLVED IN ACCIDENTS, 1980-1989

	Drivers in all accidents				Drivers in fatal accidents			
	Male		Female		Male		Female	
Year	Number	Rate*	Number	Rate*	Number	Rate**	Number	Rate**
1980	20,100,000	200	9,700,000	192	56,100	56	12,200	24
1981	20,500,000	200	9,500,000	183	53,200	52	11,800	23
1982	20,600,000	198	9,900,000	186	48,800	47	11,500	22
1983	20,400,000	187	10,300,000	184	46,300	43	11,700	21
1984	21,800,000	192	11,200,000	190	47,600	42	13,300	23
1985	21,400,000	185	11,600,000	191	46,800	40	12,700	21
1986	22,100,000	196	12,900,000	177	46,400	41	13,100	18
1987	20,700,000	192	12,300,000	148	45,500	42	13,500	16
1988	22,500,000	204	13,700,000	155	49,200	45	14,800	17
1989	14,100,000	95	8,700,000	143	47,000	32	14,800	24

Note: Procedures for estimating number of accidents and male and female mileage were changed for 1989 and thus, the numbers are not comparable to those for the previous year.
*Number of drivers in all accidents per 10,000,000 miles driven.
**Number of drivers in fatal accidents per 1,000,000,000 miles driven.
Source: National Safety Council estimates.

MALE/FEMALE AVERAGE ACCIDENT RATES, 1980-1988



In All Accidents
Number of drivers in all accidents per 10,000,000 miles driven

In Fatal Accidents
Number of drivers in fatal accidents per 1,000,000,000 miles

The Drinking Driver

Driving while intoxicated (DWI) remains a major problem involving not only the driver, but passengers, pedestrians and others on the road.

Intoxication is measured most accurately by tests for blood alcohol concentration (BAC). A BAC of 0.10 percent is the common measure of intoxication, although some states have defined a BAC of 0.08 as intoxication. However, even a BAC as low as 0.02 percent affects driving ability and crash likelihood. The probability of a crash begins to increase significantly at 0.05 percent BAC, and climbs rapidly after about 0.08 percent.

While still a primary cause of auto accidents and death, the rate of drunk driving has been gradually declining. According to the Insurance Institute for Highway Safety (IIHS), the percentage of fatally injured drivers of passenger vehicles continued a 10- year decline in 1989—down to 40 percent from a high of 53 percent in 1980. In a na-

FATALLY INJURED DRIVERS AND PEDESTRIANS WITH BACS OF 0.10 OR MORE, 1980–1989

Year	Passenger vehicles	Tractor trailers	Pedestrians *(Age 16 and over)*	Motorcycles	All
1980	53%	16%	41%	43%	50%
1981	51	15	43	47	49
1982	50	15	44	44	48
1983	48	13	42	46	46
1984	44	11	41	44	43
1985	42	7	39	42	41
1986	42	4	38	42	41
1987	41	4	37	38	40
1988	41	5	38	38	40
1989	40	8	40	41	39

Source: Insurance Institute for Highway Safety.

tional sample of passenger vehicle drivers on weekend nights in 1986, three percent had BACs at or above 0.10 percent—down from five percent in 1973.

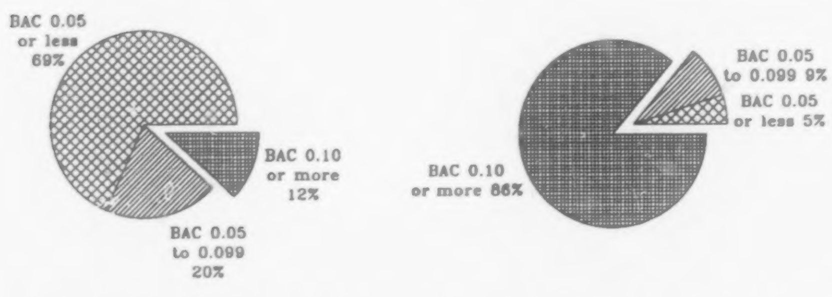
Alcohol involvement is highest in nighttime (9 p.m. to 6 a.m.) single-vehicle crashes, in which, according to IIHS statistics, 71 percent of fatally injured passenger vehicle drivers in 1989 had BACs at or above 0.10 percent. Half of all fatally injured drivers on weekends (6 p.m. Friday to 6 a.m. Monday) have BACs of 0.10 percent or more. During the rest of the week, the proportion is 31 percent.

FATALLY INJURED DRIVERS OF PASSENGER VEHICLES WITH BACs OF 0.10 OR MORE, 1989

Age	Male	Female
16–19	34%	18%
20–24	59	33
25–34	59	33
35–54	51	24
55+	16	6
All	46	22

Source: Insurance institute for Highway Safety.

BAC LEVELS AND DEATHS OF DRINKING DRIVERS ON WEEKEND NIGHTS*



Drinking drivers

Fatally injured drinking drivers

*Drinking drivers surveyed in a random sample on Friday and Saturday nights between 10 pm and 3 am in 1986; fatally injured drivers from blood test results from accident victims in similar areas at the same times as the survey. **Source:** Insurance Institute for Highway Safety.

Locations of Auto Accidents

Rural motor vehicle accidents accounted for about 65 percent of all highway fatalities but only 36 percent of non-fatal injuries in 1989, according to National Safety Council compilations. About seven out of 10 automobile accidents occur in urban locations. Likely explanations for these disparities would include the greater road mileage and higher speeds in rural areas, lack of lighting, and perhaps a lack of warning signs.

MOTOR VEHICLE ACCIDENT RESULTS BY LOCATION, 1989

	Total	Urban	Rural
Deaths	46,900	16,400	30,500
Non-fatal injuries	1,700,000	1,090,000	610,000

Source: National Safety Council.

Auto Accident Claim Costs

The costs of insurance claim settlements and court awards resulting from auto accidents have risen steadily in recent years. From 1980 through 1989, the average paid bodily injury claim rose 132.9 percent from $4,010 to $9,338; the average paid property liability claim climbed about 109.1 percent from $787 to $1,646.

At the same time the overall cost of living rose only 64.4 percent, which indicates that auto accident claim costs have increased at a greater rate than general inflation.

AVERAGE PAID CLAIM COSTS,*
LIABILITY INSURANCE, PRIVATE PASSENGER CARS

Year	Bodily injury	Property damage	Year	Bodily injury	Property damage
1980	$4,010	$787	1985	$6,815	$1,217
1981	4,453	889	1986	7,396	1,298
1982	5,041	958	1987	7,847	1,410
1983	5,699	1,020	1988	8,736	1,535
1984	6,163	1,125	1989	9,338	1,646

* For all limits combined and including all loss adjustment expenses. For bodily injury liability, dollar averages exclude Massachusetts (for all years) and most states which have no-fault automobile insurance laws. For property damage liability, dollar averages exclude Massachusetts, Michigan and South Carolina.
Source: Insurance Services Office.

Low-Speed Crash Tests

Crash tests by the Insurance Institute for Highway Safety (IIHS) of 16 small four-door 1990 model cars at 5 mph resulted in damages ranging from a low of $769 in four crash tests to a high (five times as great) of $3,838.

"The whole point of bumpers is to bump at low speeds without damage," stated Brian O'Neill, president of the IIHS. "But every bumper we tested this year did a poor job of preventing damage, and some were downright lousy. There's no way for consumers to tell which cars have bumpers that are merely poor and which have bumpers that are all but useless in protecting cars against damage."

Bumper performance may vary from one car to another even within the same model, depending on where the car is built. Toyota Corollas manufactured in Japan and exported to the United States, for example, have more protective front bumpers than both Corollas built in California and Geo Prizms, which are virtual twins to Corollas and built in the same California plant. The Prizm sustained $267 damage in the 5 mph front-into-barrier test; a Japanese-built Corolla sustained no damage in the same test.

In the early 1980s, federal regulation required new cars to pass front and rear crash tests at 5 mph without damage. But, beginning with the 1983 model year, that rule was rolled back by the National Highway Traffic Safety Administration (NHTSA) to a 2.5 mph standard which also permitted bumper damage. The 1981 Ford Escort passed and exceeded the 5 mph tests, whereas the 1990 model sustained $1,718 in damages in the same tests.

When the federal bumper requirements were relaxed in 1982, the U.S. Department of Transportation (DOT) said that consumers would be supplied with bumper performance information. "We're still waiting for DOT to make good on that promise," said O'Neill. "Consumers can't possibly find out this sort of thing on their own."

The tests of the 1990 models, all conducted at 5 mph, involved crashing the cars' front and rear ends into a flat barrier, front ends into an angle barrier, and rear ends into a steel pole similar to those found in parking lots.

Only five of the cars experienced no damage in the front and rear barrier tests, although eight had no damage in the front barrier test, and seven had no damage in the rear barrier test. All were damaged in the angle barrier and pole impact tests.

REPAIR COSTS AFTER LOW SPEED (5 MPH) CRASH TESTS
OF 1990 SMALL 4-DOOR CARS

Make & Model	Front into barrier	Rear into barrier	Front into angle barrier	Rear into pole	Total damage in all tests
Daihatsu Charade SE	$478	$1,508	$480	$1,372	$3,838
Volkswagen Jetta GL	247	363	916	1,130	2,656
Volkswagen Golf GL	179	298	761	1,013	2,251
Volkswagen Fox GL	141	433	423	993	1,990

(Table continues)

Make & Model	Front into barrier	Rear into barrier	Front into angle barrier	Rear into pole	Total damage in all tests
Mazda 323 Protege SE	0	0	718	1,203	1,921
Nissan Sentra XE	0	0	531	1,346	1,877
Ford Escort LX	0	0	314	1,404	1,718
Geo Metro	121	0	363	1,080	1,564
Subaru Loyale	0	47	570	945	1,562
Plymouth Horizon	231	480	341	424	1,476
Geo Prizm	267	0	466	732	1,465
Hyundai Excel	125	113	460	721	1,419
Mitsubishi Mirage EXE	0	73	611	513	1,197
Dodge Shadow	0	0	676	479	1,155
Toyota Corolla DX	0	0	448	492	940
Honda Civic DX	0	344	200	225	769

Source: Insurance Institute for Highway Safety

Auto Collision Insurance Claims

As in past years, claim frequencies, average loss payments per claim and average loss payments per insured vehicle year generally decreased with increasing vehicle size in all body style groups. According to a Highway Loss Data Institute (HLDI) study of 1987 to 1989 model passenger cars, vans, pickups, and utility vehicles, nearly all of the models with the best results were large or midsize domestic vehicles, many of them station wagons or passenger vans. Contrarily, nearly all of the models with the worst results were small or midsize imported vehicles, most of them sports or specialty vehicles.

The Plymouth Grand Voyager, an extended length mini-van passenger vehicle, had the best overall collision coverage result, while the Mercedes 300SE had the worst result, with an average loss payment per insured vehicle year equal to more than two and one- third times the average result for all 1989 model cars.

The average loss payment per insured vehicle year combines claim frequency and average loss payment per claim to account for not only how frequently collision coverage claims are filed, but also the magnitude of the claims.

The results for all 1989 model year vehicles combined were a frequency of 9.6 collision claims per 100 insured vehicle years, and average loss payment of $2,244 per claim, and an average loss payment per insured vehicle year of $215, according to HLDI.

Collision coverage results continue to show substantial variations among vehicles grouped by size and body style.

COLLISION COVERAGE INSURANCE LOSSES IN YEARS SINCE INTRODUCTION, RECENT MODEL PASSENGER CARS

	1989	1988	1987
Years since introduction	1	2	3
Claim freq. per 100 insured vhcl. yrs.	9.6	9.7	9.6
Avg. loss payment per claim	$2,244	$2,164	$2,047
Avg. loss payment per insured vhcl. yr.	$215	$211	$199

Source: Highway Loss Data Institute.

RELATIVE AVERAGE LOSS PAYMENTS PER INSURED VEHICLE YEAR FOR 1989 PASSENGER CARS

	Best results		
Make & series	**Body style***	**Car size***	**RALP****
Plymouth Grand Voyager	P.V.	L	46
Dodge Caravan	P.V.	L	48
Chevrolet Caprice	S.W.	L	48
Chevrolet Astro Van	P.V.	L	49
Buick Century	Sp.	M	49
Chevrolet Caprice	4-Dr.	L	50
Dodge Spirit	4-Dr.	M	51
Dodge Grand Caravan	P.V.	L	52
Plymouth Acclaim	4-Dr.	M	52
Ford Extended Aerostar	P.V.	S	53
Oldsmobile Cutlass Ciera	S.W.	M	53
Ford Crown Victoria	4-Dr.	L	55
Ford Aerostar	P.V.	L	59
Plymouth Voyager	P.V.	L	60
Plymouth Reliant	4-Dr.	M	60
Dodge Dynasty	4-Dr.	M	60

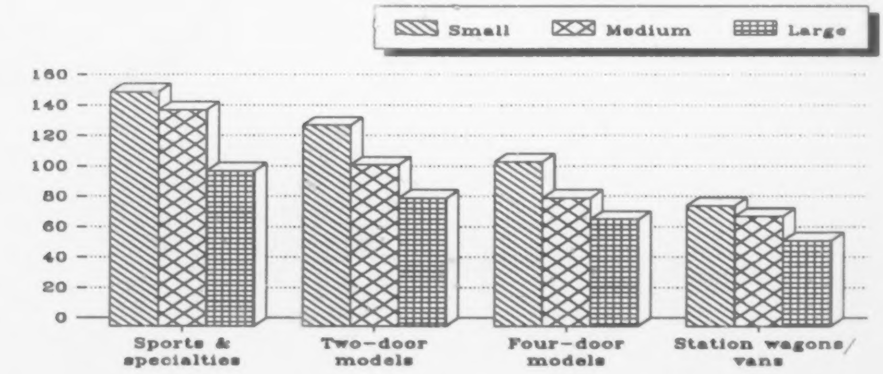
	Worst results		
Make & series	**Body style***	**Car size***	**RALP****
Mercedes 300SE	Sp.	L	235
BMW 325i/iS 2D	Sp.	M	217
BMW 325i Conv.	Sp.	M	200
BMW 325i 4D	Sp.	M	190
Ford Mustang	Sp.	M	182
BMW 500 Series	Sp.	M	180
Nissan 240SX	2-Dr.	S	169
Pontiac Lemans	2-Dr.	S	168
Saab 900	2-Dr.	S	167
Lincoln Mark VII	Sp.	M	162
Mercedes SEL Series	Sp.	L	160
Chevrolet Corvette	Sp.	S	158
Honda Civic CRX	Sp.	S	156
Nissan Sentra	2-Dr.	S	155
Geo Metro	2-Dr.	S	154
Dodge Daytona	2-Dr.	S	154

*P.V. = passenger van; S.W. = station wagon; Sp. = sports or specialty. Car size = S(mall), wheelbase less than 100 inches; M(idsize), wheelbase 100 to 109 inches; L(arge), wheelbase over 109 inches.

**Relative average loss payment; 100 represents $214.7, the average for all 1989 passenger vehicles.

Source: Highway Loss Data Institute.

RELATIVE AVERAGE LOSS PAYMENTS ON COLLISION COVERAGES PER INSURED VEHICLE YEAR, 1989 MODELS



100 represents $214.70, the average for all passenger cars. **Source:** Highway Loss Data Institute.

Automobile Personal Injury Insurance Claims, Passenger Cars

While large model passenger cars continue to have the best overall personal injury insurance claim record, their dominance is less dramatic than in years past, according to results of a study conducted annually by the Highway Loss Data Institute (HLDI): Of the 15 cars with the best results in the 1990 study of claims arising from accidents involving 1987-1989 model passenger vehicles, nine are large, five are midsize, and one is a small vehicle. By contrast, all of the 20 cars with the worst results are small cars.

Five air bag equipped models, headed by the Volvo 740/760 station wagon, were among the cars with the best injury loss experience. However, the exposure for most of these series was insufficient to compute results for the more expensive medical losses, where air bags are expected to have the greatest positive benefit.

1987–1989 PASSENGER CAR RELATIVE INJURY CLAIM FREQUENCIES UNDER PERSONAL INJURY PROTECTION COVERAGES

Best Results

(Blanks indicate insufficient exposure in insured vehicle years.)

				Relative claim frequencies by size of claim*		
Make & series	Body style**	Car size***	All	Over $250	Over $500	Over $1,000
Volvo 740/760†	S.W.	M	40			
Lincoln Continental†	S.S.	M	46			
Mercedes SEL/SDL Series†	S.S.	L	48	46	50	
BMW 735i†	S.S.	L	49			
Oldsmobile Custom Cruiser	S.W.	L	49	46		
Mercedes 560SL†	Conv.	S	50	50		
Buick Electra	S.W.	L	52			
Cadillac Seville	S.S.	M	52	57	55	
Mercury Grand Marquis	S.W.	L	52	46		
Saab 9000	S.S.	M	53	48		

(Table continues)

				Relative claim frequencies by size of claim*		
Make & series	Body style**	Car size***	All	Over $250	Over $500	Over $1,000
Chevrolet Caprice	S.W.	L	55	50	48	48
Volvo 240	S.W.	M	55	46	40	
Pontiac Safari	S.W.	L	56			
Ford Crown Victoria	4-Dr.	L	57	55	51	51
Plymouth Grand Voyager	P.V.	L	57	50	45	47

*Numbers represent frequency of claims relative to the value 100, the average for all passenger cars.
**Conv. = Convertible; P.V. = passenger van; S.W. = station wagon; S.S. =Sports & Specialty.
***Car size = S(mall), wheelbase less than 100 inches; M(idsize), wheelbase 100 to 109 inches; L(arge), wheelbase over 109 inches.
†Models equipped with airbags.
Source: Highway Loss Data Institute.

1987–1989 PASSENGER CAR RELATIVE INJURY CLAIM FREQUENCIES UNDER PERSONAL INJURY PROTECTION COVERAGES

Worst results

(Blanks indicate insufficient exposure in insured vehicle years.)

				Relative claim frequencies by size of claim*		
Make & series	Body style	Car size**	All	Over $250	Over $500	Over $1,000
Chevrolet Spectrum	4-Dr.	S	185	194	197	196
Hyundai Excel˙	4-Dr.	S	174	182	189	195
Chevrolet Sprint	2-Dr.	S	173	177	176	
Isuzu I-Mark	4-Dr.	S	173	180		
Pontiac Lemans	2-Dr.	S	165	161	162	
Isuzu I-Mark	2-Dr.	S	160			
Chevrolet Spectrum	2-Dr.	S	157	163	155	
Hyundai Excel	2-Dr.	S	157	163	166	171
Subaru XT‡	2-Dr.	S	157			
Chevrolet Sprint	4-Dr.	S	156	159	155	
Ford Festiva	2-Dr.	S	154	158	153	161
Nissan Sentra	4-Dr.	S	154	159	161	161
Pontiac LeMans	4-Dr.	S	153	165	164	
Dodge Daytona†	2-Dr.	S	151	142	144	
Nissan Sentra	2-Dr.	S	150	156	155	154
Subaru Justy	2-Dr.	S	150	153		
Ford Escort‡	2-Dr.	S	147	146	150	149
Honda Civic CRX˙	S.S.***	S	144			
Nissan Pulsar	2-Dr.	S	144	150	151	150
Yugo	2-Dr.	S	144	148	148	144

*Numbers represent frequency of claims relative to the value 100, the average for all passenger cars.
**Car size = S(mall), wheelbase less than 100 inches.
***S.S. =Sports & Specialty
˙Models equipped with nonmotor ized belt systems.
†Models equipped with airbags.
‡Models equipped with motor ized belt systems.
Source: Highway Loss Data Institute.

Accidental Deaths

Accidents in the United States in 1989 took approximately 94,500 lives. The toll was 2 percent lower than the revised 1988 total of 96,500.

National Safety Council data showed no change in accidental deaths at home and a reduction in accidental deaths at work.

ACCIDENTAL DEATHS, 1988–1989

	1989	1988	% Change
All accidents	94,500	96.500	-2
Motor vehicles	46,900	48,900	-4
Home	22,500	22,500	0
Work	10,400	10,800	-4
Public (non-motor vehicle)	19,000	18,500	+3

Note: Death figures shown for the four separate classifications total more than the "All Accidents" figure due to rounding and because some deaths are included in more than one classification.
Source: National Safety Council.

Deaths in Home Accidents

Falls and poisoning by solids and liquids accounted for approximately half of accidental deaths in the home in 1989, according to National Safety Council estimates. The number of deaths attributed to home accidents had been declining for many years, but the 1988 and 1989 totals of 22,500, while considerably lower than the 29,000 recorded in 1950, nevertheless saw a return to levels common a decade ago. However, when the increase in population during the past decade is factored in, the home death rate per 100,000 population actually declined by 10 percent.

Decreases in home deaths by poison gas, fires, firearms, and falls were offset by increases in deaths by suffocation and poisoning by solids and liquids. Home deaths from poisoning by solids and liquids, which make up the majority of all solid and liquid poisoning deaths, nearly doubled during the past decade. Poisoning by solids and liquids is now the second leading cause of home deaths (after falls). The increase is entirely due to drug-related deaths, according to the National Safety Council.

The increase in deaths from solids and liquid poisoning particularly affected the 25 to 44 year age group. This group experienced a 50 percent increase in accidental home deaths from 1979 to 1989, and was the only age group to have an increase in the home death rate per 100,000 persons during the decade (+14 percent). While home deaths for the 65 and over age group also increased, the population increase in that age group caused the death rate per 100,000 persons to drop by almost 11 percent.

NUMBERS AND TYPES OF HOME ACCIDENT DEATHS, 1980-1989

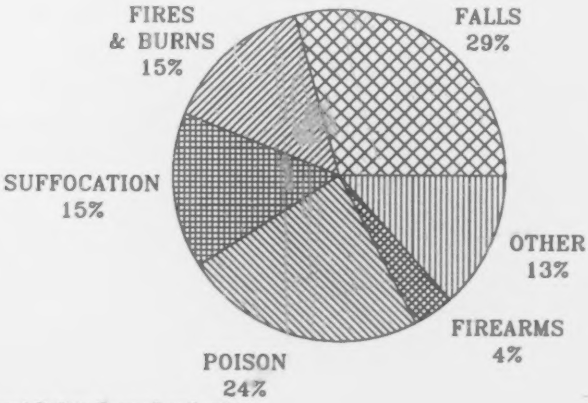
			Suffocation		**Poisoning by**				
Year	**Falls**	**Fires, burns***	**Ingested object**	**Other**	**Solids, liquids**	**Gases, vapors**	**Fire-arms**	**Other**	**Total**
1980	7,100	4,800	2,000	500	2,500	700	1,100	4,100**	22,800
1981	6,800	4,700	2,000	500	2,600	800	1,000	3,300	21,700
1982	6,500	4,300	2,100	600	2,700	800	1,000	3,200	21,200
1983	6,500	4,100	2,200	600	2,700	800	900	3,400	21,200
1984	6,400	4,100	2,300	600	3,000	700	900	3,200	21,200
1985	6,500	4,000	2,400	600	3,200	700	900	3,300	21,600
1986	6,100	4,000	2,500	600	3,700	600	800	3,400	21,700
1987	6,300	3,900	2,500	600	3,500	600	800	3,200	21,400
1988	6,400	3,800	2,800	500	4,200	600	900	3,300	22,500
1989	6,600	3,300	2,700	700	4,700	600	900	3,000	22,500

*Includes deaths resulting from conflagrations, regardless of nature of injury.

**Includes about 1,000 excessive heat deaths due to summer heat wave.

Source: National Safety Council estimates.

MOST COMMON CAUSES OF ACCIDENTAL DEATH IN THE HOME



Source: National Safety Council estimates.

Accidents at Work

Accidental deaths in the nation's workplaces continued their gradual annual decline with a drop of 400 on-the-job fatalities, to 10,400 in 1989. The modest improvement was achieved despite a rise of about 2 percent in the size of the employed labor force. The estimated number of workplace injuries also continued its downward trend, to a low of 1,700,000, again despite yearly increases in the work force. Fatality and injury rates (incidents per 100,000 workers) also hit new low marks in 1989.

The National Safety Council estimated the dollar cost of work accidents in 1989 at a record $47.6 billion. The 1988 total had also been a record – $44.5 billion.

While the cost of work accidents has been rising over the years, the upward trend should be interpreted in terms of a growing work force and a steady diminution in the value of the dollar.

The cost of work accidents includes wages lost and medical expenses, as well as indirect losses resulting from damage to equipment and materials, production delays, time lost by workers not involved in the accident, and the administrative costs of insurance.

WORK FATALITIES AND INJURIES, 1960–1989

Year	**Employed labor force** (*millions*)	**Fatalities**	**Fatalities per 100,000 workers**	**Injuries**	**Injuries per 100,000 workers**
1960	65.8	13,800	21.0	1,950,000	2,964
1970	78.7	13,800	17.5	2,200,000	2,795
1980	99.3	13,200	13.3	2,200,000	2,216
1981	100.4	12,500	12.5	2,100,000	2,092
1982	99.5	11,900	12.0	1,900,000	1,910
1983	100.8	11,700	11.6	1,900,000	1,885
1984	105.0	11,500	11.1	1,900,000	1,810
1985	106.4	11,500	10.8	2,000,000	1,866
1986	108.9	11,100	10.2	1,800,000	1,642
1987	111.7	11,300	10.0	1,800,000	1,611
1988	114.3	10,800	9.0	1,800,000	1,574
1989	116.7	10,400	8.9	1,700,000	1,457

Sources: Bureau of Labor Statistics; National Safety Council.

ECONOMIC LOSSES FROM WORK ACCIDENTS, 1960–1989

Year	**Economic loss**		**Cost per worker (1989 dollars)**
	Current dollars	**1989 dollars**	
1960	$4,400,000,000	$18,432,000,000	$280.13
1970	8,000,000,000	25,567,000,000	324.87
1980	28,000,000,000	42,136,000,000	424.33
1981	30,200,000,000	41,197,000,000	410.33
1982	29,400,000,000	37,778,000,000	379.68
1983	31,200,000,000	38,843,000,000	385.35
1984	30,800,000,000	36,758,000,000	350.08
1985	35,000,000,000	40,335,000,000	379.08
1986	32,800,000,000	37,109,000,000	340.77
1987	39,800,000,000	43,444,000,000	388.93
1988	44,500,000,000	46,644,000,000	408.09
1989	47,600,000,000	47,600,000,000	407.88

Sources: National Safety Council; Bureau of Labor Statistics Consumer Prices; Insurance Information Institute estimates.

Occupational Disease

The growing number of asbestos-related lawsuits, and mounting concern over the possible effects of exposure to toxic materials in general, have focused attention on occupational disease, the way in which victims of such diseases are compensated, and measures to lower the incidence of such diseases.

Workers' compensation, the insurance system that currently provides compensation for workplace injuries and diseases, was developed in the early part of this century. At that time, the greatest concern was how to compensate for traumatic injuries—fractures, lacerations and amputations caused by accidents with machines, for example.

What separates many types of occupational diseases from traumatic injuries is their long latency. Of the occupational risks emerging in the latter part of this century, including those of chemical, radioactive or electromagnetic origin, asbestos is of particular concern because its use as an insulating material had been so widespread.

Latency and Causality: The typical on-the-job injury—a hand caught in a machine—is readily apparent as an injury that occurred at a specific time as a result of a specific accident.

But with workers who contract debilitating diseases from exposure to hazardous substances, there is usually a time lag between the first exposure and the appearance of illness. While some diseases, such as skin rashes caused by exposure to caustic materials, show up in less than a year, the latency period for illness resulting from exposure to carcinogenics can be a decade or more, as with some asbestos-related diseases.

Long latency leads to difficulties in determining at what point in the victim's work history the illness was contracted. Was the disease-causing process set in motion by the first exposure to the harmful substance or by repeated exposures? Could the disease be said to occur at the time of exposure, or when its disabling effects were first apparent, or over the whole latency period? The responses to these questions are critical when a worker has been exposed to a substance made by more than one manufacturer, and when a company has been insured by more than one insurer during the period from the worker's initial exposure to the point at which the disease was discovered.

A further problem is that of causality. Even when a statistically significant number of cases of cancer or other serious illnesses are reported in conjunction with evidence of possible exposure to harmful substances, scientific cause-and- effect relationships generally are hard to prove, and a precise diagnosis of certain diseases is possible only with an autopsy.

Moreover, diseases associated with hazardous substances usually are not uniquely related to a simple, single work-related cause. In many cases, the incidence of a disease is greater in the public at large than it is in employees in a certain cluster of occupations. In most situations, therefore, a disease is more likely to be caused by conditions relating to the general environment or a person's lifestyle than by occupational exposure. Moreover, some symptoms are similar to those of a disease but actually are part of the aging process.

Dealing with the Problem: While the basic insurance coverage for occupational disease is workers' compensation, it may be difficult to prove that the disease is work- related for reasons mentioned above. In some states, statutory provisions that may not take into account the long-term latency of some such diseases result in time limitations that may bar some disease-disabled workers or surviving dependents from filing claims.

Recently many workers, particularly those who have been exposed to asbestos, have turned to the tort system and sued product manufacturers for monetary damages. A tort system recovery for workers may be difficult since, in most cases, a worker must not only prove that a certain agent caused the illness but must also identify its source—that is, the specific manufacturer.

Before some product liability cases can be settled, the question of when the illness was contracted must be resolved. A determination of which insurer or insurers, if any, are responsible for paying the claim can depend on a court's interpretation of the crucial timing issue.

Asbestos-related liability suits, for example, have been settled according to several different legal theories. These include:

- Exposure theory, which holds that all insurance companies (and the product manufacturer during uninsured periods) providing coverage to the asbestos manufacturer during the period the injured person was exposed to asbestos should share the cost of indemnifying and defending the policyholder;
- Manifestation theory, which holds that the company insuring the manufacturer when the disease became clinically evident must indemnify and defend the policyholder;
- Triple trigger theory, which holds that all the company's insurers during the periods of exposure to asbestos, the subsequent development of the disease (the latency period) and the manifestation of it should provide coverage.

The Outlook: According to the National Council on Compensation Insurance (NCCI), occupational disease in 1989 accounted for 1 percent of all workers' compensation claims.

As the American economy shifts away from jobs likely to result in traumatic injuries and toward the service sector, as medical researchers discover the long-term effects of prolonged exposure to toxic materials, and as state laws are liberalized to make it easier for employees to claim benefits, the proportion of workers' compensation claims involving occupational disease will grow significantly.

OCCUPATIONAL DISEASE EXPERIENCE IN THE 1980S

Disease	% of all O.D. claims	Average indemnity benefit	Average medical benefit	Average total benefit
Dust diseases	3.3	$19,868	$1,834	$21,702
Asbestosis	3.3	16,063	2,902	18,965
Black lung	16.7	50,529	13,057	63,586
Byssinosis	0.2	4,474	1,032	5,506
Silicosis	1.3	46,708	3,564	50,272
Respiratory disorder	17.9	11,006	2,164	13,170
Poisoning, chemical	3.4	8,545	2,164	10,709
Poisoning, metal	0.9	11,807	3,080	14,887
Dermatitis	17.4	2,200	495	2,695
Mental disorders	14.0	10,750	3,109	13,859

(Table continues)

Disease	% of all O.D. claims	Average indemnity benefit	Average medical benefit	Average total benefit
Radiation	0.5	16,084	1,120	17,204
Hearing loss	5.6	5,555	755	6,310
Contagious diseases	4.7	4,266	887	5,153
Cancer	1.9	15,119	3,096	18,215
Other O.D.	8.9	7,645	2,038	9,683
All O.D. claims	100.00	16,046	3,727	19,773
O.D. claims excluding black lung		9,120	1,853	10,973

Source: National Council on Compensation Insurance.

Aircraft Accidents

While the total accident rates for U.S. air carriers and commuters declined in 1989, the fatal accident rates rose, according to preliminary statistics from the National Transportation Safety Board. The number of accidents resulting in fatalities for the air carriers was the highest since 1968. Total fatalities, however, decreased slightly (from 1,160 people who died as a result of aircraft accidents in 1988 to 1,152 in 1989). Air taxis and general aviation aircraft showed decreases in their fatal accident rates, with general aviation continuing an improving trend for most of the past decade.

The major U.S. scheduled airlines suffered 24 accidents in 1989, down from 31 in 1988. Eight of those 24 accidents involved fatalities, the most since 1973, although there were fewer fatalities than in each of the two previous years.

Of the 131 fatalities registered in 1989, 111 of them occurred in the crash of a United Airlines DC-10 in Sioux City, Iowa, on July 19, the result of an emergency landing after loss of engine and hydraulic systems. Nine passengers, of a total of 355 aboard, died when a 10 by 40 foot section of the fuselage tore away in flight on a United Airlines Boeing 747 to Honolulu; two passengers, of a total of 63, died when a USAir jet plunged into the water in Flushing Bay, N.Y., after an aborted takeoff from LaGuardia Airport on September 20.

Charter airlines had four accidents, three resulting in fatalities. All but three of the 147 deaths occurred in the February 8 crash of an Independent Air B-707 in the Azores.

Commuter air carriers had 18 accidents in 1989, down one from 1988. The five fatal accidents, up two from 1988, resulted in 31 fatalities, 10 more than 1988. Air taxi accidents rose from 98 in 1988 to 110 in 1989. While the number of accidents resulting in fatalities declined from 27 to 23, fatalities increased to 80 from 58. While the accident rate rose from 3.45 to 3.83 per 100,000 aircraft flight hours, the fatal accident rate declined from 0.95 to 0.80.

For the seventh year in a row, the accident rate for general aviation aircraft (private pleasure or business flying) dropped. The 7.25 accidents per 100,000 aircraft hours declined from 7.97 in 1988. The fatal accident rate fell to 1.40 per 100,000 hours from 1.52 in 1988.

AIRCRAFT ACCIDENTS IN 1989*

	Aircraft hours flown	Accidents	Fatal accidents	Fatalities	Accidents per 100,000 flight hours
U.S. airlines:					
Scheduled	10,440,000	24	8	131	0.230**
Non-scheduled	610,000	4	3	147	0.656
Scheduled comm. carriers	2,040,000	18	5	31	0.882
Non-scheduled air taxis	2,870,000	110	23	80	3.83
General aviation	29,900,000	2,167	420	763	7.25

*Preliminary data.

**One suspected sabotage accident is excluded from total and fatal accident rates.

Source: National Transportation Safety Board.

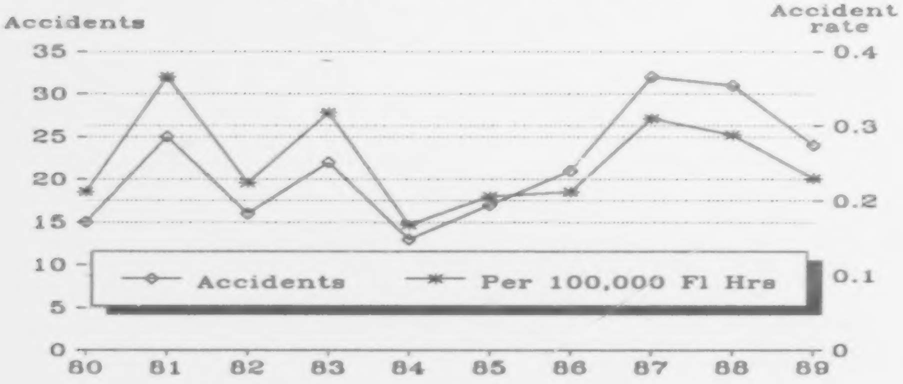
ACCIDENTS, SCHEDULED AIRLINES, 1980-1989

Year	Aircraft hours flown	Accidents	Fatal accidents	Fatalities	Accidents per 100,000 flight hours
1980	7,069,481	15	0	0	0.212
1981	6,834,140	25	4	4	0.366
1982	6,697,770	16	4	234	0.224
1983	6,914,969	22	4	15	0.318
1984	7,736,037	13	1	4	0.168
1985	8,265,332	17	4	197	0.206
1986	9,444,636	21	2	5	0.212
1987	10,015,784	32	4	231	0.310
1988	10,427,959	31	3	285	0.288
1989*	10,440,000	24	8	131	0.230

*Preliminary data.

Source: National Transportation Safety Board.

AIRCRAFT ACCIDENTS, 1980-1989



Health Insurance Benefits

According to the Health Insurance Association of America (HIAA), 1988 was a year of record losses for the health insurance industry. A survey of the 20 leading writers of health insurance conducted by HIAA in July 1989 indicated a group underwriting loss of 4.6 percent, continuing the deterioration in underwriting performance begun in 1986. Individual health insurance also showed a downward trend with an 8.4 percent underwriting loss.

The survey represents companies that write approximately 55 percent of the total group health insurance premiums and approximately 35 percent of the total individual health insurance premiums written by commercial insurance companies in the United States.

In 1988, private health insurers paid a total of $171.1 billion for medical care or disability claims, a 13 percent increase over 1987, and more than three times the amount paid 10 years earlier. The increase was primarily due to the rising cost of medical care, expansion of coverage under health insurance policies and higher utilization of these policies by those insured.

Commercial insurance companies paid nearly one half ($83 billion) of the total $171.1 billion in health insurance claims. This represents a 14.5 percent increase over the $72.5 billion paid in 1987. Blue Cross and Blue Shield plans, which usually make direct payment for covered services of the participating hospital or physician, paid more than $48.2 billion in benefits in 1988. Self- insured and health maintenance organization (HMO) plans recorded $62.8 billion in paid claims for the same period.

HEALTH INSURANCE BENEFITS PAYMENTS

	1988	1987	% change
Private insurers	$ 83,000,000,000	$72,500,000,000	+14.48
Blue Cross/Blue Shield	48,200,000,000	44,500,000,000	+8.25
Other plans*	62,800,000,000	56,500,000,000	+11.15
Private sector total**	171,100,000,000	151,700,000,000	+12.79
Medicare	85,500,000,000	79,800,000,000	+7.14
Medicaid	48,700,000,000	52,100,000,000	-6.52
Public sector total	134,200,000,000	$131,900,000,000	+1.74
Totals	**$305,300,000,000**	**$283,600,000,000**	**+7.65**

* Includes Health Maintenance Organizations, employer-employee sponsored plans, etc.

** Private sector total eliminates duplications that result from private insurers and the Health Care Financing Administration ("Other plans") both reporting Administrative Services Only benefits in their data.

Sources: Health Insurance Association of America; U.S. Health Care Financing Administration.

In 1988, the average cost for treating a patient in a community hospital was $586.33 per inpatient day, almost a 9 percent increase over 1987. On a state-by-state basis, the average charge per day in 1988 varied from a low of $353.55 in Montana to a high of $961.32 in Alaska.

AVERAGE COSTS TO HOSPITALS

State	Avg. cost to hospitals per patient day, 1988	Avg. length of stay in days, 1988	Avg. cost to hospitals per patient stay, 1988
Ala.	$505.77	6.9	$3,470.69
Alaska	961.32	5.8	5,616.07
Ariz.	759.71	6.0	4,527.36
Ark.	462.91	6.5	2,994.43
Calif.	804.16	6.3	5,060.60
Colo.	626.83	7.1	4,432.37
Conn.	685.42	7.4	5,064.93
Del.	628.32	7.0	4,390.74
D.C.	811.38	7.6	6,149.92
Fla.	646.19	7.0	4,506.01
Ga.	515.96	6.8	3,487.75
Hawaii	517.16	8.9	4,651.11
Idaho	456.87	6.8	3,150.96
Ill.	632.96	7.4	4,645.53
Ind.	571.87	6.6	3,750.37
Iowa	431.67	8.2	3,546.70
Kan.	448.33	7.8	3,497.85
Ky.	485.04	6.5	3,107.62
La.	604.78	6.3	3,784.47
Maine	475.20	8.1	3,808.36
Md.	579.47	6.9	3,996.61
Mass.	671.05	7.8	5,225.09
Mich.	643.92	7.4	4,711.68
Minn.	458.04	9.0	4,103.50
Miss.	375.23	6.9	2,592.69
Mo.	577.57	7.5	4,287.65
Mont.	353.55	9.4	3,311.94
Neb.	414.06	9.9	4,092.77
Nev.	762.92	6.2	4,840.09
N.H.	546.25	6.8	3,685.18
N.J.	509.50	7.4	3,773.66
N.M.	669.71	5.6	3,792.67
N.Y.	529.68	9.6	5,069.73
N.C.	487.00	7.3	3,537.68
N.D.	376.75	10.3	3,868.81
Ohio	612.13	6.9	4,172.70
Okla.	546.78	6.7	3,631.63
Ore.	703.47	5.5	3,833.12
Pa.	583.14	7.6	4,370.03
R.I.	545.51	8.0	4,396.07
S.C.	473.92	7.0	3,346.69
S.D.	359.76	9.0	3,214.05
Tenn.	517.45	6.9	3,545.48
Texas	628.21	6.2	3,883.53
Utah	737.33	5.4	3,879.17
Vt.	491.27	7.4	3,587.71
Va.	528.72	7.0	3,689.66
Wash.	707.63	5.7	3,984.12
W.Va.	493.94	6.8	3,318.70
Wis.	483.51	7.4	3,583.33
Wyo.	415.73	7.6	3,107.29
Nation	**$586.33**	**7.2**	**$4,206.73**
1987	$538.96	7.2	$3,850.16

Source: American Hospital Association.

Crimes against Property

Federal Bureau of Investigation data reflected a 2 percent increase in crimes against property to 12.6 million offenses in 1989. For the five-year period from 1985 to 1989, crimes against property increased 13.5 percent.

These statistics, however, reflect only the property crimes of robbery, burglary, larceny-theft and motor vehicle theft. The overall incidence—therefore, cost—of crimes against property is much higher when other kinds of offenses, including embezzlement, arson, and vandalism, are taken into account.

All but one of the categories of crimes against property included here showed an upward trend from 1988: Robbery, up 6.5 percent; larceny up 2.2 percent; motor vehicle theft up 9.2 percent; while burglary was down 1.6 percent.

The dollar loss of major crimes against property nationwide as reported by the FBI for 1989 was:

Robbery	$405.0 million
Burglary	3.4 billion
Larceny-theft	3.6 billion
Motor vehicle theft	8.0 billion

The average loss per incident was:

Robbery	$701
Burglary	1,060
Larceny-Theft	462
Motor Vehicle Theft	5,222

CRIMES AGAINST PROPERTY, 1980-1989*

Year	Robbery	Burglary	Larceny-theft	Year	Robbery	Burglary	Larceny-theft
1980	565,840	3,795,200	7,136,900	1985	497,870	3,073,300	6,926,400
1981	592,910	3,779,700	7,194,400	1986	542,780	3,241,400	7,257,200
1982	553,130	3,447,100	7,142,500	1987	517,700	3,236,200	7,499,900
1983	506,570	3,129,900	6,712,800	1988	542,970	3,218,100	7,705,900
1984	485,010	2,984,400	6,591,900	1989	578,330	3,168,200	7,872,400

*For the property crime of auto theft, see page 97.

Source: Federal Bureau of Investigation.

PROPERTY CRIME, NUMBER AND LOSSES BY STATE, 1989*

	Robbery		Burglary		Larceny-theft	
State	Offenses	Dollar loss	Offenses	Dollar loss	Offenses	Dollar loss
Ala.	5,515	$2,911,920	47,224	$41,982,136	106,771	$42,388,087
Alaska	356	196,156	4,358	4,514,888	15,811	7,067,517
Ariz.	4,954	5,835,812	59,284	70,607,244	181,574	62,824,604
Ark.	2,660	1,093,260	28,738	25,318,178	63,084	24,728,928
Calif.	96,431	103,663,325	410,468	568,087,712	972,603	578,698,785
Colo.	2,984	1,542,728	41,475	42,760,725	128,195	48,329,515
Conn.	6,956	3,324,968	40,035	37,953,180	91,483	43,728,874
Del.	934	483,812	6,072	5,319,072	20,294	8,706,126
D.C.	6,542	$3,002,778	11,780	$8,575,840	29,164	$9,128,332
Fla.	51,188	N.A.	289,254	N.A.	583,702	N.A.

(Table continues)

	Robbery		Burglary		Larceny-theft	
State	**Offenses**	**Dollar loss**	**Offenses**	**Dollar loss**	**Offenses**	**Dollar loss**
Ga.	17,450	7,433,700	110,215	88,943,505	255,578	230,275,778
Hawaii	925	614,200	14,939	17,135,033	47,374	27,429,546
Idaho	152	143,184	8,843	6,950,598	26,825	8,503,525
Ill.	39,138	11,232,606	125,441	100,854,564	362,556	125,444,376
Ind.	5,671	1,531,170	54,201	41,517,966	149,514	53,077,470
Iowa	1,108	654,828	24,052	14,527,408	79,801	23,700,897
Kan.	2,508	1,181,268	29,871	23,418,864	77,802	26,452,680
Ky.	2,836	1,746,976	30,526	34,585,958	71,611	39,672,494
La.	10,397	6,726,859	64,184	61,295,720	152,209	62,101,272
Maine	293	239,088	9,810	6,415,740	30,067	9,892,043
Md.	15,589	10,943,478	52,735	54,949,870	137,043	63,587,952
Mass.	11,980	6,217,620	63,004	50,088,180	146,925	64,353,150
Mich.	20,616	8,782,416	113,579	90,636,042	307,096	102,877,160
Minn.	4,128	1,828,704	39,042	29,671,920	122,673	42,076,839
Miss.	2,053	1,038,818	30,018	20,262,150	49,266	16,947,504
Mo.	10,060	5,412,280	58,594	57,246,338	146,269	51,779,226
Mont.	137	106,449	5,575	4,710,875	23,892	7,454,304
Neb.	837	390,879	12,010	6,353,290	46,403	9,651,824
Nev.	2,784	2,302,368	15,607	21,319,162	40,686	29,660,094
N. H.	264	259,512	8,157	6,631,641	27,087	11,837,019
N. J.	21,139	12,387,454	75,548	75,699,096	213,878	115,280,242
N. M.	1,607	928,846	26,146	24,158,904	58,201	18,449,717
N. Y.	103,983	73,515,981	211,130	324,295,680	544,459	343,553,629
N. Car.	8,770	4,463,930	98,792	83,479,240	191,783	72,877,540
N. Dak.	61	54,656	2,369	1,471,149	13,370	4,198,180
Ohio	18,635	9,317,500	111,057	91,066,740	306,609	115,591,593
Okla.	4,070	2,690,270	50,411	55,855,388	92,270	38,753,400
Ore.	4,282	2,269,460	40,197	59,491,560	103,690	51,119,170
Pa.	18,025	12,581,450	85,925	78,707,300	216,566	113,264,018
R. I.	1,122	268,158	12,045	9,021,705	27,104	10,082,688
S. Car.	4,574	2,662,068	48,914	42,946,492	107,845	43,569,380
S. Dak.	84	24,864	3,394	1,900,640	14,057	3,570,478
Tenn.	7,926	4,161,150	59,621	52,526,101	109,908	49,238,784
Texas	37,913	39,732,824	342,346	410,815,200	741,660	322,622,100
Utah	898	265,808	15,311	13,075,594	73,210	20,352,380
Vt.	102	55,488	5,835	3,430,980	15,466	5,150,178
Va.	6,494	4,773,090	46,156	41,586,556	172,645	64,223,940
Wash.	6,672	2,555,376	73,563	73,415,874	196,122	67,858,212
W. Va.	793	462,319	11,635	9,494,160	26,608	10,696,416
Wis.	3,659	2,246,626	35,683	25,441,979	140,040	39,491,280
Wyo.	81	51,678	3,001	1,944,648	13,593	3,901,191

*All figures, including the numbers of offenses, are estimates.

Source: Federal Bureau of Investigation.

Arrests by Age Group

Data compiled by the Federal Bureau of Investigation show that well over half of all arrests in 1989 for burglary, robbery, and auto theft were of persons in the 15 through 24 age group, which comprises only 14.7 percent of the population.

Persons under age 20 accounted for more than 50 percent of all arrests for the crime of arson. Nearly 43 percent of all arrests for driving under the influence of intoxicants involved persons ages 20 through 29.

These FBI data, as in the past, show that persons from 15 through 24 years of age – and, to a lesser extent, persons 25 through 29 – are involved in a disproportionately high number of arrests for offenses which often have a direct impact on losses paid by insurers.

ARRESTS, DISTRIBUTION BY AGE, SELECTED OFFENSES, 1989

		Burglary		Robbery		Larceny-theft	
Age group	**% of total**	**Arrests**	**% of total**	**Arrests**	**% of total**	**Arrests**	**% of total**
Under 15	21.7	45,017	12.6	8,895	6.6	162,402	12.9
15-19	7.2	116,718	32.7	39,260	29.3	324,871	25.9
20-24	7.5	68,959	19.3	31,706	23.7	205,292	16.4
25-29	8.7	53,357	15.0	24,978	18.7	178,082	14.2
30-34	8.9	36,332	10.2	15,730	11.8	146,600	11.7
35-39	7.9	20,187	5.7	7,835	5.9	97,699	7.8
40-44	6.8	8,849	2.5	3,123	2.3	54,943	4.4
45-49	5.5	3,823	1.1	1,305	1.0	29,811	2.4
50-54	4.6	1,647	0.5	494	0.4	18,176	1.4
55-59	4.3	849	0.2	261	0.2	12,750	1.0
60-64	4.4	466	0.1	104	0.1	9,778	0.8
65 & over	12.5	513	0.1	139	0.1	13,816	1.1
All ages	100.0	356,717	100.0*	133,830	100.0*	1,254,220	100.0

	Motor vehicle theft		Arson		Drunk driving		Drug abuse	
Age group	**Arrests**	**% of total**	**Arrests**	**% of total**	**Arrests**	**% of total**	**Arrests**	**% of total**
Under 15	20,462	11.2	4,356	29.7	362	0.0	12,359	1.1
15-19	80,187	43.9	3,062	20.9	82,705	6.2	189,838	17.6
20-24	32,941	18.0	1,959	13.4	274,577	20.6	264,972	24.6
25-29	21,558	11.8	1,575	10.7	295,204	22.1	245,650	22.8
30-34	13,889	7.6	1,329	9.1	234,033	17.6	177,780	16.5
35-39	7,425	4.1	893	6.1	160,025	12.0	101,773	9.5
40-44	3,472	1.9	611	4.2	107,997	8.1	47,009	4.4
45-49	1,465	0.8	355	2.4	70,029	5.3	19,943	1.9
50-54	687	0.4	218	1.5	43,939	3.3	8,520	0.8
55-59	367	0.2	135	0.9	29,206	2.2	4,257	0.4
60-64	167	0.1	86	0.6	18,730	1.4	1,959	0.2
65 & over	190	0.1	88	0.6	16,520	1.2	1,668	0.2
All ages	182,810	100.0*	14,667	100.0*	1,333,327	100.0*	1,075,728	100.0*

*Percentages do not add to total because of rounding.

Source: Federal Bureau of Investigation.

Motor Vehicle Thefts

Motor vehicle thefts increased 9.2 percent in 1989. These offenses account for 12 percent of all property crimes.

The value of motor vehicles stolen nationwide during 1989 was more than $8 billion, according to Federal Bureau of Investigation estimates.

MOTOR VEHICLE REGISTRATIONS AND THEFTS, 1980-1989

Year	Motor vehicle registrations*	Thefts**	Ratio of vehicles stolen to registered	Thefts per 100,000 registrations
1980	161,614,294	1,131,700	1 in 143	700
1981	164,287,643	1,087,800	1 in 151	662
1982	165,298,024	1,062,400	1 in 156	643
1983	167,718,000	1,007,900	1 in 166	601
1984	169,446,281	1,032,200	1 in 164	609
1985	175,709,000	1,102,900	1 in 159	628
1986	181,890,000	1,224,100	1 in 149	673
1987	186,137,000	1,288,700	1 in 144	692
1988	183,930,000	1,432,900	1 in 128	779
1989	188,931,016	1,564,800	1 in 121	828

*Estimates. **Includes motorcycles. **Source:** Federal Bureau of Investigation.

MOTOR VEHICLE THEFTS AND DOLLAR LOSSES BY STATE, 1989*

State	Thefts	% change from 1988	Dollar loss	State	Thefts	% change from 1988	Dollar loss
Ala.	12,249	+11.3	$77,634,162	Mont.	1,818	+4.5	$452,874,114
Alaska	2,398	+2.7	11,287,386	Neb.	3,000	-0.8	24,062,346
Ariz.	24,426	+53.5	132,120,234	Nev.	6,439	+1.4	861,362,259
Ark.	6,391	+24.0	33,929,819	N.H.	2,701	+8.1	95,164,848
Calif.	298,445	+12.2	1,274,061,705	N.J.	71,106	+3.0	452,874,114
Colo.	15,022	+8.2	66,892,966	N.M.	5,346	-9.2	24,062,346
Conn.	22,601	+13.6	139,154,357	N.Y.	171,007	+11.1	85,305,163
Del.	2,632	+31.5	14,120,680	N.C.	18,748	+14.7	61,004,160
D. C.	8,291	-4.0	36,961,278	N.D.	746	-5.1	323,559,825
Fla.**	102,086	+7.8	NA	Ohio	47,477	+9.4	54,563,268
Ga.	42,075	+18.5	231,117,975	Okla.	18,877	+4.0	69,315,010
Hawaii	4,410	+10.9	11,196,990	Ore.	15,232	-6.5	2,851,140
Idaho	1,610	-8.6	6,581,680	Pa.	56,517	+10.1	158,845,050
Ill.	70,806	+1.3	390,990,732	R.I.	9,223	+12.0	835,926,427
Ind.	21,877	+11.0	102,734,392	S.C.	12,013	+12.9	14,970,696
Iowa	4,496	-2.2	15,771,968	S.D.	779	+14.1	4,929,360
Kan.	7,473	+23.9	36,318,780	Tenn.	26,325	-1.4	111,973,092
Ky.**	8,191	+18.6	43,617,075	Texas	150,971	+12.5	55,643,998
La.	22,842	+14.6	237,990,798	Utah	4,056	+11.2	14,782,058
Maine	2,239	-9.3	9,997,135	Vt.	1,128	+2.8	4,929,360
Md.	31,177	-0.1	184,318,424	Va.	18,956	+4.8	111,973,092
Mass.	53,851	+2.8	297,580,626	Wash.	21,787	+9.0	55,643,998
Mich.	67,007	-2.8	468,981,993	W.Va.	2,911	-4.4	14,782,058
Minn.	16,537	+13.2	84,322,163	Wis.	16,146	+23.5	60,095,412
Miss.	4,696	+7.4	2,109,432	Wyo.	652	-2.8	2,693,412
Mo.	27,011	+21.0	132,948,142				

* Estimated from reports.
Percent change from 1988 for Florida and Kentucky is based on a comparison of estimated 1988 figures and actual 1989 data. **Source: Federal Bureau of Investigation.

Insured Automobile Theft Losses

Vehicle theft rose 9 percent in 1989 and 11 percent in 1988, according to the FBI's Uniform Crime Report. The National Automobile Theft Bureau reports that last year's upward trend of vehicle thefts affected all geographic regions, with western states reporting a 12 percent increase, southern states up 10 percent, northeastern states up 8 percent, and midwestern states up 6 percent. Some cities in the West and Southwest reported auto theft increases of more than 50 percent in 1989. In Phoenix, for example, thefts rose 92.1 percent, while Riverside, Calif., and Little Rock, Ark., reported thefts up 60.1 and 51.2 percent.

Motor vehicle theft is the fastest-growing type of crime in the United States. Combined with auto insurance fraud, it has caused insurance costs to escalate sharply.

The theft loss results of different vehicles vary enormously, according to the Highway Loss Data Institute (HLDI). Ten of the 11 cars with the highest theft claim frequencies are imported models; nearly all cars with the lowest frequencies are domestic models. In many cases, however, theft claims are for stolen vehicle components, such as radios, rather than for theft of the vehicles themselves, according to HLDI. So vehicles with the most frequent claims aren't necessarily those with the most costly claims.

Sports and specialty models had the highest overall theft losses. While accounting for only about 14 percent of the total insurance exposure, they account for nearly 40 percent of the total dollars paid in theft claims.

LOSS EXPERIENCE SUMMARY BY VEHICLE SIZE AND MODEL YEAR, THEFT LOSSES, 1987-89 PASSENGER CARS

	Relative claim frequency			Relative average loss payment per claim			Relative average loss payment per insured vehicle year		
Model year	**1989**	**1988**	**1987**	**1989**	**1988**	**1987**	**1989**	**1988**	**1987**
Small*									
2-door	124	123	118	65	58	65	81	71	77
4-door	175	168	142	47	47	54	83	78	77
S.W./P.V.**	49	68	56	79	50	70	39	34	39
S & S†	193	179	195	197	183	141	380	326	274
Midsize*									
2-door	69	73	86	130	139	158	90	101	137
4-door	68	62	59	86	90	90	59	56	53
S.W./P.V.**	45	37	39	74	63	69	33	24	27
S & S†	141	150	157	146	172	169	206	258	266
Large*									
2-door	51	95	76	240	172	150	121	163	114
4-door	92	93	79	162	131	118	150	122	94
S.W./P.V.**	46	42	48	139	90	76	64	38	36
S & S†	226	163	187	118	145	123	267	237	230
All car average = 100									
Actual results	7.7‡	8.6‡	9.6‡	$2,316	$2,391	$2,308	$18.00	$20.50	$22.10

*Small = wheelbase less than 100 inches; midsize = wheelbase 100 to 109 inches; large = wheelbase more than 109 inches. **Station wagons and passenger vans. †Sports and specialty models. ‡Claims per 1,000 insured vehicle years.

Source: Highway Loss Data Institute.

CHAPTER 7

Laws Affecting Motorists

Automobile Financial Responsibility and Compulsory Laws

Most states have laws, commonly known as financial responsibility laws, under which a person involved in an automobile accident may be required to furnish proof of financial responsibility (usually done in the form of automobile liability insurance) up to certain minimum dollar limits. The provinces of Canada have similar laws. Mexico has no financial responsibility law as such, but requires an auto liability insurance policy written with a Mexican company.

Many states also require car owners to buy a minimum amount of bodily injury and property damage liability insurance. A typical state minimum would be bodily injury coverage that pays up to $20,000 for each person hurt in an accident, but not more than $40,000 per accident. State minimum financial liability requirements for property damage are typically $10,000 per accident. As shown in the list below, Alabama has exactly these minimum requirements.

Because accidents frequently cost far more than the minimum limits mandated by most states, car owners need more liability insurance than the law requires.

Insurance companies and consumer publications often recommend at least $100,000 of bodily injury protection per person and $300,000 per accident.

AUTOMOBILE FINANCIAL RESPONSIBILITY/COMPULSORY LIMITS

State	Liability limits*	State	Liability limits*
Alabama	20/40/10	Kentucky	25/50/10
Alaska	50/100/25	Louisiana	10/20/10
Arizona	15/30/10	Maine	20/40/10
Arkansas	25/50/15	Maryland	20/40/10
California	15/30/5	Massachusetts	10/20/5
Colorado	25/50/15	Michigan	20/40/10
Connecticut	20/40/10	Minnesota	30/60/10
Delaware	15/30/10	Mississippi	10/20/5
District of Columbia	25/50/10	Missouri	25/50/10
Florida	10/20/10	Montana	25/50/5
Georgia	15/30/10	Nebraska	25/50/25
Hawaii	35/unlimited/10	Nevada	15/30/10
Idaho	25/50/15	New Hampshire	25/50/25
Illinois	20/40/15	New Jersey	15/30/5
Indiana	25/50/10	New Mexico	25/50/10
Iowa	20/40/15	New York	10/20/5[1]
Kansas	25/50/10	North Carolina	25/50/10

(Table continues)

State	Liability limits*	State	Liability limits*
North Dakota	25/50/25	Texas	20/40/15
Ohio	12.5/25/7.5	Utah	20/40/10
Oklahoma	10/20/10	Vermont	20/40/10
Oregon	25/50/10	Virginia	25/50/20
Pennsylvania	15/30/5	Washington	25/50/10
Rhode Island	25/50/25	West Virginia	20/40/10
South Carolina	15/30/5	Wisconsin	25/50/10
South Dakota	25/50/25	Wyoming	25/50/20
Tennessee	20/50/10		

*The first two figures refer to bodily injury liability limits and the third figure to property damage liability. For example, 10/20/5 means coverage up to $20,000 for all persons injured in an accident, subject to a limit of $10,000 for one individual, and $5,000 coverage for property damage. [1] 50/100 if injury results in death.

CANADA**

Province	Liability limit	Province	Liability limit
Alberta	$200,000	Nova Scotia	$200,000
British Columbia	200,000	Ontario	200,000
Manitoba	200,000	Prince Edward Island	200,000
New Brunswick	200,000	Quebec	50,000
Newfoundland	200,000	Saskatchewan	200,000
Northwest Territories	200,000	Yukon	200,000

**In all Canadian provinces except Quebec, the amount of liability insurance shown is available to settle either bodily injury or property damage claims—or both. When a claim involving both bodily injury and property damage reaches this "inclusive" limit, payment for property damage is limited to $20,000 in British Columbia, Manitoba, New Brunswick and Newfoundland, and to $10,000 in the other provinces and territories having "inclusive" limits. Quebec laws provide that people injured in accidents in Quebec be compensated by a government fund. Benefits paid to non-residents are scaled down in proportion to their degree of fault. The $50,000 limit relates to liability for damage to property in Quebec and to liability for bodily injury and property damage outside Quebec.

Sources: American Insurance Association; Insurance Bureau of Canada.

No-Fault Automobile Insurance

The term "no-fault" auto insurance often is used loosely to denote any auto insurance program that allows the policyholder to recover financial losses from his or her own insurance company, regardless of fault. But, in its strictest form, no-fault applies only to state laws that both provide for the payment of no-fault first-party benefits and restrict the right to sue.

Motorists may sue for severe injuries and for pain and suffering, but only if the case meets certain conditions. These conditions, known as a threshold, relate to the severity of injury. They may be expressed in verbal terms or dollar amounts of medical bills. The former is called a descriptive or verbal threshold; the latter a monetary threshold.

Currently 15 states and Puerto Rico have no-fault auto insurance laws with restrictions on filing suit. Of these, five states have verbal thresholds; the 10 other states use monetary thresholds. In three states – New Jersey, Pennsylvania, and Kentucky – motorists may reject the lawsuit threshold and retain the right to sue for any auto-related injury.

Other states allow policyholders to obtain compensation for auto accidents from their own insurers. These are known as "add-on" states, because first-party insurance benefits have been added on to the traditional liability system. There are no restrictions on lawsuits; first-party coverage may not be mandatory; and first-party benefits may be lower than in true no-fault states.

Sharply rising auto insurance costs have prompted states to reexamine the effectiveness of no-fault laws. Some tort liability states are considering no-fault or providing a choice between a no-fault and tort liability system. Other states that already have no-fault laws are considering raising the monetary threshold or adopting a verbal threshold or providing a choice between a verbal threshold and no threshold.

Jurisdictions which have forms of "first-party" auto insurance, and the dates on which the laws originally became effective, follow. Only the first two categories, with restrictions on the right to sue, are strict no- fault laws.

FIRST PARTY AND LIABILITY INSURANCE LAWS

Compulsory first-party and liability insurance; some restrictions on lawsuits

Colorado, 4/1/74
Connecticut, 1/1/73
Georgia, 3/1/75
Hawaii, 9/1/74
Kansas, 1/1/74
Kentucky, 7/1/75
Massachusetts, 1/1/71
Michigan, 10/1/73
Minnesota, 1/1/75
New Jersey, 1/1/73 (amended 1988)
New York, 2/1/74
North Dakota, 1/1/76
Pennsylvania, 7/1/90
Utah, 1/1/74

Compulsory first-party; optional liability insurance; some restrictions on lawsuits

Florida, 1/1/72
Puerto Rico, 1970

Compulsory first-party and liability insurance; no restrictions on lawsuits

Delaware, 1/1/72
Maryland, 1/1/73
Oregon, 1/1/72

Compulsory liability; optional first-party insurance; no restrictions on lawsuits

Arkansas, 7/20/87
Dist. of Col., 6/3/86
South Carolina, 10/1/74
Texas, 6/17/81

Insurance not compulsory; first-party benefits optional; no restrictions on lawsuits

New Hampshire, 10/1/71
South Dakota, 1/1/72
Virginia, 1/1/72
Washington, 1973
Wisconsin, 5/18/72

Source: American Insurance Association.

Automobile Seat Belt Laws

Seat-belt usage laws have been passed by 34 states and the District of Columbia. In May 1990, the Governor of Arizona signed a seat-belt use law, effective January 1, 1991.

Seat-belt use by drivers in the United States hit an all-time high of 47 percent in 1988. According to Transportation Secretary Samuel Skinner, in 1989 unbuckled seat belts cost 9,200 lives and $6 billion in associated costs.

STATES WITH AUTO SEAT-BELT USE LAWS

State	Effective	Penalty	Style*
Arizona	1/1/91	Front-seat passengers only; $10 fine for first offense; $25 for repeaters	S
California[1]	1/1/86	Max. fine $20 for 1st offense; $50 for repeaters	S
Colorado	7/1/87	$10 fine	S
Connecticut	1/1/86	$15 fine	P
Dist. of Col.	12/12/85	Max. $15 fine	S
Florida	7/1/86	$20 fine	S
Georgia	9/1/88	Max. $15 fine (driver only)	S
Hawaii	12/16/85	$20 fine	P
Idaho	7/1/86	Max. $5 fine	S
Illinois	7/1/85	Max. $25 fine	S
Indiana	7/1/87	Max. $25 fine	S
Iowa	7/1/86	$10 fine	P
Kansas	7/1/86	Max. $10 fine	S
Louisiana	7/1/86	$25 fine	S
Maryland	7/1/86	Max. $25 fine	S
Michigan	7/1/85	$25 fine	S
Minnesota	10/1/87	$10 fine	S
Missouri	9/28/85	Max. $10 fine	S
Montana[2]	10/1/87	$20 fine	S
Nevada	7/1/87	Max. $25 fine or community service, 1st viol.	S
New Jersey	3/1/85	$20 fine	S
New Mexico	1/1/86	Min. $25 fine; max. $50 fine	P
New York	12/1/84	Max. $50 fine	P
North Carolina	10/1/85	$25 fine	P
Ohio	5/6/86	$20 fine for drivers; $10 fine for passenger	S
Oklahoma	2/1/87	$10 fine plus $15 administrative costs	S
Pennsylvania	11/23/87	$10 fine	S
South Carolina	7/1/89	$10 fine	S
Tennessee	4/21/86	Warning for 1st offense; $25 fine for repeaters	S
Texas	9/1/85	Min. $25 fine; max. $50 fine	P
Utah	4/28/86	$10 fine	S
Virginia	1/1/88	$25 fine	S
Washington	6/11/86	$47 (fine & assessment on driver)	S
Wisconsin	12/1/87	Possible $10 fine	S
Wyoming	6/8/89	No fine	S

*Enforcement style: P = Primary: Police may stop and ticket unbelted drivers; S = Secondary: Ticketing only if stopped for another offense.

[1] Law applies to front and back seat passengers as well as drivers.

[2] Montana voters rejected repeal in a 1988 referendum.

Source: Insurance Institute for Highway Safety.

Drunk Driving Laws

The U.S. Department of Transportation (DOT) estimates that there is an alcohol- related fatality every 22 minutes and that two out of every five Americans will be involved in an alcohol-related accident during their lifetimes. Based on 1987 accidents, if even 10 percent fewer drivers were drunk, the annual savings would be about 2,400 lives, 53,000 injuries and more than $1 billion in costs to society, a large portion of which is paid for by in-

(Continued on page 106)

State	Age	1st offense license suspension	BAC defining DWI	Alcoholic beverage servers liable? by law	Alcoholic beverage servers liable? by court decision
Alabama	21[1]	90 days	0.10	yes	yes
Alaska	21	90 days	0.10	yes	yes
Arizona	21[1]	90 days	0.10	yes	yes
Arkansas	21	90 days	0.10		
California	21	6 mos.	0.08	yes	
Colorado	21	3 mos.	0.10[4]	yes	yes
Connecticut	21	1 yr.	0.10	yes	yes
Delaware	21	3 mos.	0.10[4]		yes
District of Columbia	21[1]	6 mos. (rev.)	0.10[4]		
Florida	21	6 mos.	0.10	yes	yes
Georgia	21[1]	1 yr.	0.10[4]	yes	yes
Hawaii	21	90 days	0.10		yes
Idaho	21[1]	6 mos.	0.10[4]	yes	yes
Illinois	21	1 yr. min.	0.10	yes	
Indiana	21	60 days-1 yr.	0.10	yes	yes
Iowa	21	180 days	0.10	yes	yes
Kansas	21	Limited use, 90 days	0.10		
Kentucky	21	30 days-6 mos.	0.10	yes	yes
Louisiana	21[1,2]	60 days	0.10		yes
Maine	21	90 days	0.08 (.02 under 21)	yes	
Maryland	21	60 days max.	0.10		
Massachusetts	21	45-90 days	0.10		yes
Michigan	21	6 mos.-2 yrs.	0.10	yes	
Minnesota	21	30 days	0.10	yes	
Mississippi	21	90 days-1 yr.	0.10	yes	yes
Missouri	21	30 days	0.13[4]	yes	yes
Montana	21[1]	6 mos.	0.10	yes	yes
Nebraska	21	6 mos.	0.10		
Nevada	21	90 days	0.10		
New Hampshire	21	90 days-2 yrs.	0.10	yes	
New Jersey	21	6 mos.	0.10	yes	yes
New Mexico	21	90 days	0.10 (.05 under 18)	yes	yes
New York	21	6 mos.	0.10	yes	
North Carolina	21	1 yr.	0.10	yes	yes
North Dakota	21	91 days	0.10	yes	
Ohio	21	60 days	0.10	yes	
Oklahoma	21	2-6 mos.	0.05-0.10		yes
Oregon	21	1 yr.	0.08	yes	yes
Pennsylvania	21	1 yr.	0.10	yes	yes
Rhode Island	21	3-6 mos.	0.10	yes	
South Carolina	21	6 mos.	0.10		yes
South Dakota	21	30 days	0.10		
Tennessee	21[1]	1 yr.	0.10	yes	
Texas	21	90 days-1 yr.	0.10[4]	yes	yes
Utah	21	90 days	0.08[4]	yes	yes
Vermont	21	3 mos.-1 yr.	0.08	yes	
Virginia	21[1]	6 mos.	0.10		
Washington	21	90 days	0.10		yes
West Virginia	21[3]	6 mos.	0.10		yes
Wisconsin	21	6 mos.	0.10	yes	yes
Wyoming	21	90 days	0.10	yes	yes

---

[1] "Grandfather clause:" persons under 21 reaching previous legal drinking age before a certain date retain their drinking age status; [2] 18–20 year–olds permitted to drink in private homes or clubs when accompanied by parent, spouse, or guardian age 21 or older, or for medical or religious reasons; [3] Except for "non-in-

Special measures	**State**
Mandatory school for convicted DWIs	Ala.
Ban on "happy hours"; some local REDDI[5] lines; Administrative license revocation	Alaska
Administrative license revocation	Ariz.
Governors' advisory council	Ark.
Open container law; license rev. for drivers under 21 convicted of alcohol-related crime and for drivers who refuse to take a BAC test (6 mos.) or who have a BAC of .10 or higher (4 mos.)	Calif.
Administrative license revocation; REDDI[5] line; first offense 48 hrs. jail or public service	Colo.
Administrative license revocation at the scene; 48 hrs. jail or public service for 1st offense	Conn.
Administrative license revocation	Del.
Alcohol awareness rehabilitation for first offenders; "impaired driving" citation at BAC 0.05	D. C.
Statewide rehabilitation program; road side license suspension for those arrested with a BAC of .10 or who refuse to be tested for BAC	Fla.
Required high school courses on drinking and driving; DWI grand jury	Ga.
Mandatory education; roadblocks; alcohol to minors by parents only; on-the-spot license rev. for drivers who refuse to take a blood alcohol test or who have a BAC of .10 or higher	Hawaii
Mandatory treatment for DWIs; REDDI[5] hot line	Idaho
Second and subsequent offenses classified as felonies; administrative license revocation	Ill.
Administrative license revocation	Ind.
Toll-free hot line; CB radio watch; administrative license revocation	Iowa
48 hrs. to 6 mos. in jail or 100 hrs. public service and fine for 1st offense; admin. lic. rev.	Kan.
30-day susp. with educ. program, 6 mos. without; under 18 lose license 6 mos. or until 18	Ky.
Mandatory education and community service; "hardship" law; admin. license revocation	La.
48 hrs. jail if BAC over .15; under 21 lose licenses at BAC .02; admin. license revocation	Maine
Administrative license revocation; 1 yr. suspension for 2nd offense	Md.
Ban on "happy hours"; 14 days jail for 2d offense; 1-15 yrs. for vehic. homicide; roadblocks	Mass.
	Mich.
Administrative license revocation	Minn.
Rehabilitation program with incentives (reduced suspension); admin. license revocation	Miss.
Administrative license revocation; 60-day restricted use; REDDI[5] line	Mo.
Fine, jail for first offender DWIs; increased penalties for subsequent offenses	Mont.
Trooper incentive program; REDDI[5] line	Neb.
2 days jail or public service; 3d DWI in 7 years a felony; administrative license revocation	Nev.
DWI resulting in death, up to 15 yrs. prison; resulting in serious injury, up to 7-1/2 yrs.	N.H.
Auto insurance surcharge of $1,000 per yr. for 3 yrs. for 1st and 2nd offense	N.J.
Administrative suspension pending hearing; vehicles of repeat offenders impounded 90 days	N.M.
Education program; aggravated unlicensed operation an offense; 1 year rev. under 21	N.Y.
Color coding on driver licenses to better enforce drinking age; admin. license revocation	N.C.
Mandatory substance addiction evaluation for first offenders; admin. license revocation	N.D.
Educational program for first offenders; REDDI[5] program	Ohio
Governor's task force; administrative license revocation	Okla.
CB reporting system; REDDI[5] program; administrative license revocation	Ore.
Under age purchase or consumption of alcohol may result in loss of license	Pa.
Toll-free hot line; community service; 6-month susp. for teen-agers with BAC .04 or more	R.I.
Open container law; drunk drivers subject to insurance premium surcharges	S.C.
	S.D.
Mandatory education requirement	Tenn.
Mandatory education program for the first offense; hot line; open container law	Texas
Jail or community service for first offense; administrative license revocation	Utah
Administrative susp. at BAC .10; if BAC 0.15 in test 2 hrs. after arrest, presumed same at time of arrest	Vt.
Jail term up to 1 year; alcohol safety action program; court- ordered DWI program	Va.
Sophisticated testing procedures; toll-free hot line; CB reporting system; task force	Wash.
Administrative license suspension	W. Va.
Administrative license revocation	Wis.
REDDI[5] hot line; administrative license revocation	Wyo.

toxicating" beer; [4]Per se definition (state has lower "presumed intoxicated" BAC number); [5]REDDI is an acronym for Report Every Drunk Driver Immediately.

Source: Insurance Information Institute.

surance.

In the past few years the insurance industry, grass-root citizen groups and government at the federal, state and local levels have stepped up the fight against drunk drivers. Federal and state statistics have shown that relative to increases in the driving population, drunk driving fatalities, especially among younger drivers, are declining. The major reasons for the decline appear to be greater public awareness of the risks of drunk driving, the effect of public and private programs to discourage drunk driving and changes in drinking habits. Federally legislated laws also are making an impact on drunk driving behavior.

A related issue is liquor liability—the question of who may be liable if individuals injure themselves or other people while driving, or in other public situations. By making sellers and others who supply alcohol more careful about how they serve drinks, liquor liability laws help to cut down on the number of drunk drivers. Many states and the District of Columbia have some form of liquor liability law which holds sellers or servers of liquor liable for a drunk person's foreseeable damage while under the influence.

Anti-DWI (driving while intoxicated) activity currently is centered on increasing penalties and adopting countermeasures as specified in the Drunk Driving Prevention Act. For example, five states—Maine, Oregon, Utah, Vermont, and California—have strengthened the legal definition of drunk driving, changing the standard from .10 percent to .08 percent blood alcohol content. An administrative revocation law that would immediately suspend a drunk driver's license is on the books in 29 states and the District of Columbia.

Nine states authorize judges to require convicted drunk drivers to use an interlock, a device that prevents a car from being started if, when the driver breathes into the sensor, alcohol is detected. Other states are considering using the device.

CHAPTER 8

Glossary & Directory

Insurance Glossary

Accident and health insurance ■ A type of coverage that pays benefits, sometimes including reimbursement for loss of income, in case of sickness, accidental injury, or accidental death.

Actual cash value ■ In many insurance policies, the amount awarded for property damage losses; commonly defined as replacement cost less depreciation.

Agent ■ The independent agent is an independent business person who usually represents two or more insurance companies in a sales and service capacity and who is paid on a commission basis. The exclusive agent represents only one company, usually on a commission basis. The direct writer is a salaried or commissioned employee of a single company.

Allied lines ■ A term for forms of property insurance allied with fire insurance, covering such perils as windstorm, hail, explosion, and riot.

Arson ■ The willful and malicious burning of, or attempt to burn, any structure or other property, often with criminal or fraudulent intent.

Assets ■ All funds, property, goods, securities, rights of action, or resources of any kind owned by an insurance company. Statutory accounting, however, excludes non-admitted assets, such as deferred or overdue premiums, that would be considered assets under generally accepted accounting principles (GAAP).

Automobile insurance plan ■ One of several types of "shared market" mechanisms used to make automobile insurance available to persons who are unable to obtain such insurance in the voluntary market.

Automobile liability insurance ■ Protection for the insured against financial loss because of legal liability for car-related injuries to others or damage to their property.

Automobile physical damage insurance ■ Coverage to pay for damage to or loss of an insured automobile resulting from collision, fire, theft, or other perils.

Automobile reinsurance facility ■ One of several types of "shared market" mechanisms used to make automobile insurance available to persons who are unable to obtain such insurance in the regular market.

Automobile shared market ■ A program in which all automobile insurers in each state and the District of Columbia participate to make coverage available to car owners who are unable to obtain auto insurance in the voluntary market. Except in Maryland, which operates a state-funded mechanism whose losses are subsidized by private insurers, each state uses one of three systems (an automobile insurance plan, a joint underwriting association, or a reinsurance facility) to guarantee the availability of automobile insurance.

Aviation insurance ■ Aircraft insurance including coverage of aircraft or their contents, the owner's liability, and accident insurance on the passengers.

Boiler and machinery insurance ■ Coverage for loss arising out of the operation of pressure, mechanical, and electrical equipment. It covers loss of the boiler and machinery itself, damage to other property, and business interruption losses.

Broker ■ A marketing specialist who represents buyers of property and liability insurance and who deals with either agents or companies in arranging for the coverage required by the customer.

Burglary ■ Breaking and entering into another person's property with felonious intent.

Burglary and theft insurance ■ Coverage against property losses due to burglary, robbery, or larceny.

Business interruption insurance ■ Protection for a business owner against losses resulting from a temporary shutdown because of fire or other insured peril. The insurance provides reimbursement for lost net profits and necessary continuing expenses.

Capacity ■ The amount of capital available to an insurance company or to the industry as a whole for underwriting general insurance coverage or coverage for specific perils.

Captive insurance company ■ A company owned solely or in large part by one or more non-insurance entities for the primary purpose of providing insurance coverage to the owner or owners.

Casualty insurance ■ Insurance concerned with the insured's legal liability for injuries to others or for damage to other persons' property; also encompasses such forms of insurance as plate glass, burglary, robbery and workers' compensation.

Catastrophe ■ In insurance, an incident or series of related incidents causing insured property losses totaling more than $5 million.

Claim ■ A demand to recover for a loss covered by an insurance policy.

Coinsurance ■ A provision in an insurance policy under which the insured agrees to carry a certain amount of insurance expressed as a percentage of the value of the property. It provides for the full payment, up to the amount of the policy, of all losses if the insurance carried is at least equal to the specified percentage. If the insured fails to carry the necessary amount of insurance, he or she assumes a proportionate share of the loss.

Collision insurance ■ An automobile insurance coverage against damage to the policyholder's vehicle caused by collision with another car or object or by upset.

Combined ratio ■ Basically, a measure of the relationship between dollars spent for claims and expenses and premium dollars taken in; more specifically, the sum of the ratio of losses incurred to premiums earned and the ratio of commissions and expenses incurred to premiums written. A ratio above 100 means that for every premium dollar taken in, more than a dollar went for losses, expenses, and commissions.

Commercial lines ■ Insurance for businesses, organizations, institutions, governmental agencies, and other commercial establishments.

Commercial multiple peril policy ■ A package of insurance that includes a wide range of essential coverages for the commercial establishment.

Commissioner ■ A state officer who administers the state's insurance laws and regulations. In some states, this regulator is called the director or superintendent of insurance.

Comprehensive personal liability insurance ■ Protection against loss arising out of legal liability to pay money for damage or injury to others for which the insured is responsible. It does not include automobile or business operation liabilities.

Compulsory insurance ▪ Any form of insurance which is required by law.

Coverage ▪ The scope of protection provided under a contract of insurance; any of several risks covered by a policy.

Credit insurance ▪ A guarantee to manufacturers, wholesalers, and service organizations that they will be paid for goods shipped or services rendered. Applies to that part of working capital which is represented by accounts receivable.

Crop-hail insurance ▪ Protection against damage to growing crops as a result of hail or certain other named perils.

Deductible ▪ An amount which a policyholder agrees to pay, per claim or per accident, toward the total amount of an insured loss. Insurance is written on this basis at reduced rates.

Dividend ▪ (1) An amount returned to a policyholder by an insurance company out of its earnings. (2) In capital stock companies, a share of the profits distributed to stockholders.

Earned premiums ▪ The portion of a premium which is the property of an insurance company, based on the expired portion of the policy period. E.g., a $300 premium for a one-year policy beginning July 1 would amount to an earned premium of $150 the following January 1.

Economic loss ▪ The estimated total cost, both insured and uninsured, of mishaps (such as motor vehicle accidents, work accidents, and fires); includes such factors as property damage, funeral expenses, wage loss, insurance administration costs, and medical, hospital and legal costs.

Embezzlement ▪ Fraudulent use or taking of another's property or money which has been entrusted to one's care.

Environmental impairment insurance ▪ A form of insurance designed to cover losses and liabilities arising from damage to property by pollution.

Errors and omissions insurance ▪ A form of insurance that indemnifies the insured for any loss sustained because of an error or oversight on his or her part.

Excess and surplus insurance ▪ (1) Insurance to cover losses above a certain amount, with losses below that amount usually covered by a regular policy. (2) Insurance to cover an unusual or one-time risk, e.g., damage to a musician's hands or the multiple perils of a convention, for which coverage is unavailable in the normal market. (See also "Umbrella liability" and "Surplus lines.")

Extended coverage insurance ▪ Protection for the insured against property damage caused by windstorm, hail, smoke, explosion, riot, riot attending a strike, civil commotion, vehicle and aircraft. This is provided in conjunction with the fire insurance policy and the various "package" policies.

FAIR Plan ▪ A facility, operating under a program of the government and the insurance industry, to make fire insurance and other forms of property insurance readily available to persons and businesses for whom such insurance is not easily available or affordable.

Farmowners-ranchowners policy ▪ A package policy for a farm or a ranch, providing property and liability coverages against personal and business losses.

Federal Crime Insurance ▪ Insurance against burglary, larceny, and robbery losses offered by the federal government where the Federal Insurance Administration has determined that an insurance availability problem exists.

Fidelity bond ▪ A form of protection which reimburses an employer for losses caused by dishonest or fraudulent acts of employees.

Financial responsibility law ▪ A state law under which a person involved in an automobile accident may be required to furnish security up to certain minimum dollar limits.

Fire insurance ▪ Coverage for losses caused by fire and lightning, plus resultant damage caused by smoke and water.

Flood insurance ▪ Coverage against loss resulting from flood.

General liability insurance ▪ Coverage that pertains, for the most part, to claims arising out of the insured's liability for injuries or damage caused by ownership of property, manufacturing operations, contracting operations, sale or distribution of products, and the operation of machinery, as well as professional services.

Glass insurance ▪ Protection for loss of or damage to glass and its appurtenances.

Group insurance ▪ Any insurance plan under which a number of persons and their dependents are insured under a single policy, issued to their employer or to an association with which they are affiliated.

Guaranty fund ▪ A fund, derived from assessments against solvent insurance companies, to absorb losses of claimants against insolvent insurance companies.

Hard market ▪ That part of the insurance sales cycle in which competitive pricing is at a minimum as companies charge the premiums necessary to meet their underwriting losses in order to avoid insolvency and boost capacity; usually associated with a sharp decline in capacity (see "Soft market").

Health insurance ▪ Insurance against financial losses resulting from sickness or accidental bodily injury.

Homeowners policy ▪ A package of insurance providing home owners with a broad range of property and liability coverages.

Hurricane ▪ A tropical storm marked by extremely low barometric pressure and circular winds with a velocity of 75 miles an hour or more.

Inland marine insurance ▪ A broad form of insurance, generally covering articles in transit as well as bridges, tunnels and other means of transportation and communication. Besides goods in transit (generally excepting trans-ocean), it includes numerous "floater" policies, such as those covering personal effects, personal property, jewelry, furs, fine arts, and other items.

Insurance ▪ A system under which individuals, businesses, and other organizations or entities, in exchange for payment of a sum of money (a premium), are guaranteed compensation for losses resulting from certain perils under specified conditions.

Insurance company ▪ An organization chartered to operate as an insurer.

Insured ▪ A person or organization covered by an insurance policy, including the "named insured" and any other parties for whom protection is provided under the policy terms.

Investment income ▪ The portion of a company's income which is derived from its investments, including interest and dividends on stocks and bonds.

Joint Underwriting Association ▪ One of several types of "shared market" mechanisms used to make automobile insurance available to persons who are unable to obtain such insurance in the regular market. JUAs also have been created in some states to help alleviate availability problems in the fields of medical malpractice and commercial insurance.

Larceny-theft ▪ The unlawful taking, carrying, leading or riding away of another person's property.

Liability ▪ Any legally enforceable obligation.

Liability insurance ▪ Insurance covering the policyholder's legal liability resulting from injuries to other persons or damage to their property.

Liability limits ▪ The stipulated sum or sums beyond which an insurance company is not liable to protect the insured.

Life insurance ▪ Insurance providing for payment of a specified amount on the insured's death, either to his or her estate or to a designated beneficiary; or in the case of an endowment policy, to the policyholder at a specified date.

Loss ▪ The basis on which an insurance claim is submitted.

Malpractice insurance ▪ Coverage for a professional practitioner, such as a doctor or a lawyer, against liability claims resulting from alleged malpractice in the performance of professional services.

Marine insurance ▪ A form of insurance primarily concerned with means of transportation and communication, and with goods in transit (see "Inland marine insurance" and "Ocean marine insurance").

Medical payments insurance ▪ A coverage, available in various liability insurance policies, in which the insurer agrees to reimburse the insured and others, without regard for the insured's liability, for medical or funeral expenses incurred as the result of bodily injury or death by accident under specified conditions.

No-fault automobile insurance ▪ A form of insurance by which a person's financial losses resulting from an automobile accident are paid by his or her own insurer regardless of who was at fault.

Non-admitted insurance company ▪ An insurance company not licensed to do business in a particular state; such a company, however, may sell excess and surplus insurance in that state if admitted insurers lack the capacity or expertise.

Ocean marine insurance ▪ Insurance for sea-going vessels, including liabilities connected with them, and their cargoes.

Package policy ▪ A single insurance policy that includes several coverages.

Peril ▪ The cause of a loss insured against in a policy.

Personal lines ▪ Those types of insurance, such as auto or home insurance, for individuals or families rather than for businesses or organizations.

Policy ▪ A contract of insurance.

Policyholder ▪ A person who pays a premium to an insurance company in exchange for the insurance protection provided by a policy of insurance.

Policyholders' surplus ▪ Sum left after liabilities are deducted from assets. Sums such as paid-in capital and special voluntary reserves are also included in this term. This surplus is an additional financial protection to policyholders in the event a company suffers unexpected or catastrophic losses. In effect, it is the financial base that permits a company to sell insurance.

Pool ▪ An organization of insurers or reinsurers through which particular types of risk are underwritten and premiums, losses and expenses are shared in agreed-upon amounts.

Premium ▪ The sum paid for an insurance policy. Written premiums refer to the premiums for policies sold within a given time period, usually a calendar year. Direct written premiums are the amounts actually paid by policyholders. Net written premiums represent premium income retained by insurance companies, directly or through reinsurance, after payments made for reinsurance.

Premium tax ▪ A tax, imposed by each state, on the premium income of insurers doing business in the state.

Product liability insurance ▪ Protection against financial loss arising out of the legal liability incurred by a manufacturer, merchant, or distributor because of injury or damage resulting from the use of a covered product.

Property insurance ▪ Insurance providing financial protection against the loss of, or damage to, real and personal property caused by such perils as fire, theft, windstorm, hail, explosion, riot, aircraft, motor vehicles, vandalism, malicious mischief, riot and civil commotion, and smoke.

Rate ▪ The pricing factor upon which the insurance buyer's premium is based.

Ratemaking ▪ The statistical process by which insurers determine risks and pricing for the basic classes of insurance.

Regulation ▪ Supervision of business practices by a governmental entity.

Reinsurance ▪ Assumption by one insurance company of all or part of a risk undertaken by another insurance company.

Reserve ▪ (1) An amount representing liabilities kept by an insurer to cover claims and other obligations to policyholders. (2) An amount allocated for a special purpose. Note that a reserve is usually a liability and not an extra fund.

Residual market ▪ A system through which insurance is made available to buyers that represent unusually high risks.

Risk ▪ The chance of loss. Also used to refer to the insured or to property covered by a policy.

Risk retention group ▪ An alternative form of insurance in which members of a similar profession or business band together to self insure their risks.

Robbery ▪ The taking of property from a person by force or threat of violence.

Soft market ▪ That part of the insurance sales cycle in which competition is at a maximum as insurance companies use their excess capacity to sell more policies at lower prices (see "Hard market").

State fund ▪ A fund set up by a state government to provide a specific line or lines of insurance. Some states permit private insurers to compete with the state fund.

Statutory accounting ▪ Special accounting practices for insurance companies required by state law and designed to provide greater protection for the public against potential insolvency of these essential institutions.

Statutory underwriting profit or loss ▪ Premiums earned less losses and expenses.

Surety bond ▪ An agreement providing for monetary compensation in the event of a failure to perform specified acts within a stated period. The surety company, for example, becomes responsible for fulfillment of a contract if the contractor defaults.

Surplus lines ■ (1) A risk or a part of a risk for which there is no normal insurance market available. (2) Insurance written by non-admitted insurance companies.

Tornado ■ A whirling wind over land, accompanied by a funnel-shaped cloud. It is usually very violent and destructive in a narrow path, often for many miles.

Tort ■ A wrongful act, resulting in injury or damage, on which a civil action may be based.

Umbrella liability ■ Insures losses in excess of amounts covered by other liability insurance policies; also protects the insured in many situations not covered by the usual liability policies.

Underwriting ■ The process of selecting risks for insurance and determining in what amounts and on what terms the insurance company will accept the risk.

Underwriting profit or loss ■ The amount of money which an insurance company gains or loses as a result of its underwriting operations. A net gain or loss on underwriting operations represents a company's statutory underwriting profit less (or, if there is a loss, plus) any amount it may pay to its policyholders in the form of dividends.

Unearned premium ■ The portion of a premium that a company has collected but has yet to earn because the policy still has unexpired time to run.

Uninsured motorist protection ■ A form of insurance which covers the policyholder and family members if injured by a hit-and-run motorist or a driver who carries no liability insurance, assuming the other driver is at fault.

Workers' compensation insurance ■ A method of providing for the cost of medical care and income to injured employees or to dependents of those killed in industry, regardless of blame.

State Insurance Commissioners

The majority of state commissioners are appointed by state governors and serve at their pleasure. The states, designated with an asterisk (*), presently elect insurance commissioners to four-year terms.

Alabama ■ Mike Weaver, Commissioner of Insurance, 135 South Union St., Montgomery, AL 36104. Tel. 205-269-3550.

Alaska ■ David Walsh, Director of Insurance, P.O. Box "D", Juneau, AK 99811. Tel. 907-465-2515.

American Samoa ■ Fanene Su'a Scanlan, Insurance Commissioner, Office of the Governor, Pago Pago, AS 96797. Tel. 684-633-4116.

Arizona ■ Susan Gallinger, Director of Insurance, 3030 North 3rd St., Suite 1100, Phoenix, AZ 85012. Tel. 602-255-5400.

Arkansas ■ Ron Taylor, Insurance Commissioner, 400 University Tower Building, Little Rock, AR 72204. Tel. 501-371-1325.

California* ■ John Garamendi, Commissioner of Insurance, 100 Van Ness Ave., San Francisco, CA 94102. Tel. 415-557-1126; 800-233-9045.

Colorado ■ Joanne Hill, Commissioner of Insurance, 303 W. Colfax Ave., Suite 500, Denver, CO 80204. Tel. 303-866-6274.

Connecticut ■ Peter F. Kelly, Insurance Commissioner, 165 Capitol Ave., Hartford, CT 06106. Tel. 203-297-3801.

Delaware* ■ David N. Levinson, Insurance Commissioner, The Rodney Bldg., 841 Silver Lake Blvd., Dover, DE 19901. Tel. 302-739-4251; 800-282-8611.

District of Columbia ■ Margurite C. Stokes, Superintendent of Insurance, 613 G St., NW, 6th Floor, Washington, DC 20001. Tel. 202-727-7424.

Florida* ■ Tom Gallagher, Insurance Commissioner, State Capitol, Plaza Level 11, Tallahassee, FL 32399-0300. Tel. 904-488-3440; 800-342-2762.

Georgia* ■ Tim Ryles, Insurance Commissioner, 2 Martin L. King, Jr. Dr., Floyd Memorial Building, 704 West Tower, Atlanta, GA 30334. Tel. 404-656-2056.

Guam ■ Joaquin G. Blaz, Acting Insurance Commissioner, P.O. Box 2796, Agana, GU 96910. Tel. 011-671-477-5106.

Hawaii ■ Robin Campaniano, Insurance Commissioner, P.O. Box 3614, Honolulu, HI 96813. Tel. 808-548-5450; 800-548-5450.

Idaho ■ Anthony Fagiano, Director of Insurance, 500 S. 0th St., Boise, ID 83720. Tel. 208-334-2250.

Illinois ■ Zack Stamp, Director of Insurance, 320 W. Washington St., 4th Floor, Springfield, IL 62767. Tel. 217-782-4515.

Indiana ■ John J. Dillon III, Commissioner of Insurance, 311 West Washington St., Suite 300, Indianapolis, IN 46204-2787. Tel. 317-232-2385; 800-622-4461.

Iowa ■ David J. Lyons, Acting Commissioner of Insurance, Lucas State Office Building, 6th Floor, Des Moines, IA 50319. Tel. 515-281-5705.

Kansas* ▪ Ron Todd, Commissioner of Insurance, 420 South West Ninth St., Topeka, KS 66612. Tel. 913-296-7801; 800-432-2484.

Kentucky ▪ Elizabeth P. Wright, Insurance Commissioner, 229 West Maine St., P.O. Box 517, Frankfort, KY 40602. Tel. 502-564-3630.

Louisiana* ▪ Douglas D. Green, Commissioner of Insurance, P. O. Box 94214, Capitol Station, Baton Rouge, LA 70801. Tel. 504-342-5900.

Maine ▪ Joseph A. Edwards, Superintendent of Insurance, State House, Station 34, Augusta, ME 04333. Tel. 207-582-8707.

Maryland ▪ John A. Donaho, Insurance Commissioner, 501 St. Paul Pl., 7th Floor South, Baltimore, MD 21202. Tel. 301-333-2520; 800-492-6116.

Massachusetts ▪ Timothy H. Gailey, Commissioner of Insurance, 280 Friend St., Boston, MA 02114. Tel. 617-727-7189.

Michigan ▪ Dhiraj Shah, Acting Insurance Commissioner, P. O. Box 30220, Lansing, MI 48933. Tel. 517-373-9273.

Minnesota ▪ Thomas H. Borman, Commissioner of Commerce, 133 E. 7th Street, St. Paul, MN 55101. Tel. 612-296-6848; 800-652-9747.

Mississippi* ▪ George Dale, Commissioner of Insurance, 1804 Walter Sillers Building, Jackson, MS 39205 (P.O. Box 79, Jackson, MS 39205). Tel. 601-359-3569.

Missouri ▪ Lew Melahn, Director of Insurance, 301 W. High St. 6 North, P.O. Box 690, Jefferson City, MO 65102-0690. Tel. 314-751-4126.

Montana* ▪ Andrea Bennett, Commissioner of Insurance, 126 North Sanders, Mitchell Building, Rm. 270, Helena, MT 59601 (P.O. Box 4009, Helena, MT 59604). Tel. 406-444-2040; 800-332-6148.

Nebraska ▪ William H. McCartney, Director of Insurance, Terminal Bldg., 941 O St., Suite 400, Lincoln, NE 68508. Tel. 402-471-2201.

Nevada ▪ Al Iuppa, Commissioner of Insurance, 1665 Hot Springs Rd., Carson City, NV 89710. Tel. 702-687-4270; 800-992-0900.

New Hampshire ▪ Louis E. Bergeron, Insurance Commissioner, 169 Manchester St., Concord, NH 03301. Tel. 603-271-2261; 800-852-3416.

New Jersey ▪ Samuel F. Fortunato, Commissioner of Insurance, CN 325-20 West State St., Trenton, NJ 08625. Tel. 609-292-5363.

New Mexico ▪ Fabian Chavez, Superintendent of Insurance, Department of Insurance, P.O. Drawer 1269, Sante Fe, NM 87504. Tel. 505-827-4500.

New York ▪ Salvatore R. Curiale, Superintendent of Insurance, 160 W. Broadway, New York, NY 10013. Tel. 212-602-0429; 800-522-4370.

North Carolina* ▪ James E. Long, Commissioner of Insurance, P.O. Box 26387, Raleigh, NC 27611. Tel. 919-733-7349; 800-662-7777.

North Dakota* ▪ Earl R. Pomeroy, Commissioner of Insurance, Capitol Building, Fifth Floor, 600 East Blvd., Bismarck, ND 58505-0320. Tel. 701-224-2440; 800-247- 0560.

Ohio ▪ George Fabe, Director of Insurance, 2100 Stella Court, Columbus, OH 43266-0566. Tel. 614-644-2658; 800-282-4658.

Oklahoma* ▪ Gerald Grimes, Insurance Commissioner, P. O. Box 53408, Oklahoma City, OK 73105-3408. Tel. 405-521-2828.

Oregon ▪ Theodore R. Kulongoski, Insurance Commissioner, 21 Labor and Industries Bldg., Salem, OR 97310. Tel. 503-378-4271.

Pennsylvania ▪ Constance B. Foster, Insurance Commissioner, 1326 Strawberry Square, 13th Floor, Harrisburg, PA 17120. Tel. 717-787-5173.

Puerto Rico ▪ Miguel A. Villafane, Commissioner of Insurance, Fernandez Juncos Station, P.O. Box 8330, Santurce, PR 00910. Tel. 809-722-8686.

Rhode Island ▪ Fred J. Franklin, Insurance Commissioner, 233 Richmond St., Providence, RI 02903. Tel. 401-277-2223.

South Carolina ▪ John G. Richards, Chief Insurance Commissioner, 1612 Marion St., P.O. Box 100105, Columbia, SC 29201-3105. Tel. 803-737-6117.

South Dakota ▪ Mary Jane Cleary, Director of Insurance, Insurance Building, 910 E. Sioux Ave., Pierre, SD 57501. Tel. 605-773-3563.

Tennessee ▪ Elaine A. McReynolds, Commissioner of Insurance, 500 James Robertson Pkwy., Nashville, TN 37243-0565. Tel. 615-741-2241; 800-342- 4029.

Texas ▪ Commissioner of Insurance, 1110 San Jacinto Blvd., Austin, TX 78701-1998. Tel. 512-463-6464.

Utah ▪ Harold C. Yancey, Commissioner of Insurance, 3110 State Office Bldg., Salt Lake City, UT 84114. Tel. 801-538-3800.

Vermont ▪ Jeffrey Johnson, Commissioner of Insurance, State Office Building, 120 State St., Montpelier, VT 05602. Tel. 802-828-3301.

Virgin Islands ▪ Derek M. Hodge, Commissioner of Insurance, 18 Kongen's Garden, St. Thomas, VI 00802. Tel. 809-774-2991.

Virginia ▪ Steven T. Foster, Commissioner of Insurance, 1200 Jefferson Building, 1220 Bank St., Richmond, VA 23219 (P.O. Box 1157, Richmond, VA 23209). Tel. 804-371-7694; 800-552-7945.

Washington* ▪ Richard G. Marquardt, Insurance Commissioner, Insurance Building, AQ-21, Olympia, WA 98504. Tel. 206-753-7301; 800-562-6900.

West Virginia ▪ Hanley C. Clark, Insurance Commissioner, 2019 Washington St., East, Charleston, WV 25305. Tel. 304-348-3394; 800-642-9004.

Wisconsin ▪ Robert D. Haase, Commissioner of Insurance, 121 E. Wilson St., Madison, WI 53702. Tel. 608-266-0102.

Wyoming ▪ Kenneth Erickson, Insurance Commissioner, Herschler Building, 122 W. 25th St., Cheyenne, WY 82002. Tel. 307-777-7401.

Insurance and Service Organizations

The following organizations are supported by insurance companies or have activities closely related to insurance. National and state organizations which subscribe to the services of the Insurance Information Institute are identified by an asterisk(*).

***ACORD** ▪ Robert Merriman, president, One North Broadway, White Plains, NY 10601. Tel. 914- 682-0800. An industry-sponsored institute serving as the focal point for improving the computer processing of insurance transactions through the insurance agency system.

Advocates for Highway & Auto Safety ▪ Judith Lee Stone, executive director, 777 North Capitol Street, NE, Suite 410, Washington, DC 20002. Tel. 202-408-1711. An alliance of consumer, safety and insurance organizations dedicated to highway and auto safety.

Alliance of American Insurers ▪ Franklin W. Nutter, president, 1501 Woodfield Rd., Suite 400 West, Schaumburg, IL 60173-4980. Tel. 708-330-8500. Trade association to facilitate cooperation among property and casualty insurance companies in matters of concern to them and their policyholders.

American Academy of Actuaries ▪ James J. Murphy, executive vice president, 1720 I St., NW, 7th Floor, Washington, DC 20006. Tel. 202-223-8196. Professional association for actuaries. Issues standards of conduct and provides government liaison and advisory opinions.

American Association of Crop Insurers ▪ E. Eugene Gantz, president, 2501 M St., NW, Washington, DC 20037. Tel. 202-463-0541. Trade association of insurance companies to promote crop insurance.

American Association of Insurance Services ▪ Paul A. Baiocchi, president and chief executive officer, 1035 S. York Rd., Bensenville, IL 60106. Tel. 708-595-3225. Rating, statistical, and advisory organization, principally of small and medium–sized property/casualty companies.

American Association of Managing General Agents ▪ Jerry Fogel, executive vice president, 9140 Ward Parkway, Kansas City, MO 64114. Tel. 816-444-3500. Membership association of managing general agents of insurers.

American Council of Life Insurance ▪ Richard S. Schweiker, president, 1001 Pennsylvania Ave., NW, Suite 500, Washington, DC 20004. Tel. 202-624-2000. Trade association responsible for the public relations, government, legislative and research aspects of the life insurance business.

American Institute for Property and Liability Underwriters Inc. ▪ Dr. Norman A. Baglini, CPCU, CLU, president, 720 Providence Rd. Malvern, PA 19355-0770. Tel. 215-644-2100. Developed the Chartered Property Casualty Underwriter (CPCU) professional designation program and administers national CPCU examinations.

***American Institute of Marine Underwriters** ▪ Ward L. Mauck, president, 14 Wall St., New York, NY 10038. Tel. 212-233-0550. Provides information of interest to marine underwriters and promotes their interests.

American Insurance Association ▪ Robert E. Vagley, president, 1130 Connecticut Ave., NW, Suite 1000, Washington, DC 20036. Tel. 202-828-7100. Trade and service organization for property and casualty insurance companies; provides a forum for the discussion of problems; provides safety, promotional and legislative services.

American Insurance Services Group, Inc. ▪ Lawrence M. Zippin, president, 85 John St., New York, NY 10038. Tel. 212-669-0400. Wholly owned subsidiary of the American Insurance Association, administers five industry service organizations, the Index System, Property Insurance Loss Register, Premium Audit Advisory Service, Property Claim Services and Engineering & Safety Service.

American Land Title Association ▪ James Maher, executive vice president, 1828 L St., NW, Suite 705, Washington, DC 20036. Tel. 202-296-3671. Trade organization for title insurers, abstractors and agents. Performs statistical research and lobbying services.

***American Nuclear Insurers** ▪ Robert J. Clark, president, The Exchange, Suite 245, 270 Farmington Ave., Farmington, CT 06032. Tel. 203-677-7305. A nonprofit unincorporated association through which liability and property insurance protection is provided against hazards arising out of nuclear reactor installations and their operations.

American Prepaid Legal Services Institute ▪ Alec M. Schwartz, executive director, 541 N. Fairbanks Ct., Chicago, IL 60611. Tel. 312-988-5751. National membership organization to provide information and technical assistance to lawyers, insurance companies, administrators, marketers and consumers regarding group and prepaid legal service plans.

***Arbitration Forums, Inc.** ▪ Yvonne Weaver, president, 200 White Plains Rd., Tarrytown, NY 10591-0066. Tel. 914-332-4770. A nonprofit corporation that arbitrates and mediates disputes over insurance-related matters.

***Association of Fire and Casualty Companies in Texas** ▪ Barnett Williams, executive manager, c/o Trinity Universal Insurance Co., 10000 N. Central Expressway, Box 655028, Dallas, TX 75265-5028. Tel. 214-360-8000. Represents domestic Texas property and liability insurance companies in seeking to broaden consumer knowledge of insurance and in supporting legislation to improve the insurance business.

***Automobile Insurance Plans Service Office** ▪ John J. Corbley, president, 302 Central Ave., Johnston, RI 02919-5095. Tel. 401-946-2310. Develops and files rates and provides other services for automobile insurance plans.

***Casualty Actuarial Society** ▪ Charles A. Bryan, president, One Penn Plaza, New York, NY 10119. Tel. 212-560-1018(9). Promotes actuarial and statistical science in all insurance fields except life.

***College of Insurance** ▪ Dr. Ellen Thrower, president and chief executive, 101 Murray St., New York, NY 10007. Tel. 212-962-4111. Insurance industry-supported college providing a curriculum leading to bachelor's and master's degrees in business administration, insurance, financial services, and actuarial science.

Conference of Insurance Legislators ▪ Charles Davis, executive director, P.O. Box 217, Brookfield, WI 53008. Tel. 414-782-6669. Organization of chairmen of state legislative committees concerned with insurance-related matters.

Crop Insurance Research Bureau ▪ Henry A. Butler, president, 3707 Woodview Trace, Box 68700, Indianapolis, IN 46268. Tel. 317-875-5250. Crop insurance trade organization.

Defense Research Institute, Inc. ▪ Louis Potter, executive director, 750 North Lake Shore Drive, Suite 500, Chicago, IL 60611. Tel.312-944-0575. Service organization to improve the administration of justice and defense lawyers' skills.

Federal Insurance Administration ▪ C.M. "Bud" Schauerte, administrator, 500 C St., NW, Washington, DC 20472. Tel. 202-646-2781. Administers the federal flood insurance and crime insurance programs.

***Fire Prevention and Engineering Bureau of Texas** ▪ Richard A. Comstock, manager, 1431 Greenway Dr., Suite 520, Irving, TX 75038-2417. Tel. 214-580-0096. Performs risk inspections, prepares underwriting reports, inspects fire defenses of Texas cities for members and subscribers.

Foreign Credit Insurance Association ▪ John Hanson, president, 40 Rector St., 11th Floor, New York, NY 10006. Tel. 212-306-5000. Offers credit insurance facilities for U.S. exporters through cooperation of the insurance business and the Export-Import Bank of Washington.

Hawaii Insurers Council ▪ Wendell K. Kimura, executive director/general council, 1160 Pauahi Tower, 1001 Bishop St., Honolulu, HI 96813. Tel. 808-521-7233. Membership and legislative organization representing the interests of insurers in Hawaii.

Health Insurance Association of America ▪ Carl J. Schramm, president, 1025 Connecticut Ave., NW, Suite 1200, Washington, DC 20036. Tel. 202-223-7780. Central source of health insurance information for the public on behalf of insurance companies; monitors public attitudes and reactions to health insurance developments.

Highway Loss Data Institute ▪ Brian O'Neill, president, 1005 North Glebe Road, Arlington, VA 22201. Tel. 703- 247-1600. Nonprofit organization to gather, process and provide the public with insurance data concerned with human and economic losses resulting from highway accidents.

Independent Insurance Agents of America, Inc. ▪ Jeffrey M. Yates, executive vice president, 127 S. Peyton Street, Alexandria, VA 23314. Tel. 703-683-4422. Trade association of independent insurance agents.

Independent Reinsurance Underwriters Association, Inc. ▪ J. Dale Bohm, executive director, P.O. Box 1569, Canton, GA 30114. Tel. 404-479-0265. Educational association to encourage the exchange of ideas among American reinsurers writing principally treaty reinsurance.

***Inland Marine Underwriters Association** ▪ James Mooney, president, 14 Wall St., New York, NY 10005. Tel. 212-233-7959. Forum for discussion of problems of common concern to inland marine insurers.

Institute for Civil Justice ▪ Dr. Kevin McCarthy, director, 1700 Main St., P.O. Box 2138, Santa Monica, CA 90406- 2138. Tel. 213-393-0411. Organization formed within the Rand Corporation to perform independent, objective research and analysis concerning the civil justice system.

Insurance Accounting and Systems Association ▪ Elaine Powell, secretary-treasurer, P.O. Box 51340, Durham, NC 27717. Tel. 919- 489-0991. An international organization to promote the study, research, and development of modern techniques in insurance accounting and statistics.

***Insurance Committee for Arson Control** ▪ Rick Gilman, executive director, 110 William St., New York, NY 10038. Tel 212- 669-9245. All-industry coalition; serves as a catalyst for insurers' anti-arson efforts and a liaison with government agencies and other groups devoted to arson control.

***Insurance Crime Prevention Institute** ▪ Wendall C. Harness, director, 15 Franklin St., Westport, CT 06880. Tel. 203- 226-6347. Serves property and casualty insurers in the investigation of fraudulent insurance claims, other than accident, health and workers' compensation.

***Insurance Fund Foundation** ▪ D. McKay Snow, president, 1501 Fourth Ave., Suite 1650, Seattle, WA 98101. Tel. 206-624-3928. Provides educational programs and materials to teachers, students and the general public.

Insurance Information Institute ▪ Mechlin D. Moore, president, 110 William St., New York, NY 10038. Tel. 212-669- 9200. An educational, fact-finding, and communications organization for all lines of insurance except life and health insurance. It is supported by some 300 insurance companies and provides services on a subscribership basis to many major industry organizations.

Insurance Institute for Highway Safety ▪ Brian O'Neill, president, 1005 North Glebe Road, Arlington, VA 22201. Tel. 703- 247-1500. Traffic safety organization supported by automobile insurers.

Insurance Institute of America, Inc. ▪ Dr. Norman A. Baglini, CPCU, CLU, president, 720 Providence Rd.,Malvern, PA 19355-0770. Tel. 215-644-2100. Provides educational opportunities to property and liability insurance and related fields; provides standards for measurement of achievement through the administration of national examinations.

Insurance Library Association of Boston ▪ Barbara Thornton, president of the board, 156 State St., Boston, MA 02109. Tel. 617-227-2087. A nonprofit, independent membership library serving the research and education interests of all branches of the insurance industry.

Insurance Regulatory Examiners Society ▪ Howard Spence, president, 6811 W. 63rd St., Suite 208, Overland Park, KS 66202. Tel. 913-831-0080. Nonprofit professional and educational association for examiners and other professionals working in insurance regulation.

Insurance Research Council (formerly All-Industry Research Advisory Council) ▪ Donald W. Segraves, executive director, 1200 Harger Rd., Suite 310, Oakbrook, IL 60521. Tel. 708-572-1177. Provides the public and the insurance industry with timely research information relevant to public policy issues affecting risk and insurance.

***Insurance Services Office, Inc.** ▪ Fred R. Marcon, president, 175 Water St., New York, NY 10038. Tel. 212-487-5000. Provides a wide range of advisory, rating, actuarial, statistical and other services relating to property and casualty insurance, including the development of policy forms, rates, premiums, and related services for monoline and multiple line coverages. Offers services, including research studies, to insurers or other persons or organizations.

***Insurance Value Added Network Services** ▪ Robert Barham, president, 411 West Putnam Ave., Greenwich, CT 06830. Tel. 203- 629-4826. An industry-sponsored organization offering a value added data communications network linking agencies, companies and providers of data to the insurance industry.

***International Insurance Council** ▪ Gordon Cloney, president, Suite 250, 1212 New York Ave., NW, Washington, DC 20005. Tel. 202-682-2345. Speaks for and coordinates the international noncommercial activities of U.S. insurance and reinsurance companies.

ISO Commercial Risk Services Inc. ▪ B. Joseph Shelley, president, 2 Sylvan Way, Parsippany, NJ 07054. Tel. 201- 267-0359. A wholly-owned subsidiary of Insurance Services Office, Inc., providing individual property survey and rating information to the property/casualty insurance industry.

ISO Telecommunications, Inc. ▪ Dominick R. Cortellessa, president, 160 Water St., New York, NY 10038. Tel 212-487-5000. A wholly-owned subsidiary of Insurance Services Office, Inc., established to telecommunicate ISO products and services to ISO-participating insurers.

***Kansas Association of Propery and Casualty Insurance Companies** ▪ L.M. Cornish, secretary-treasurer, 900 Merchants Tower, 8th and Jackson Streets, Topeka, KS 66612. Tel. 913-232-0545. Represents 17 domestc insurers in Kansas.

Kansas Insurance Education Foundation ▪ L.M. Cornish, secretary-treasurer, P.O. Box 1280, Topeka, KS 66601. Tel. 913- 232-0545. Nonprofit organization devoted to promotion and encouragement of insurance education in Kansas. Develops teaching aids, supports insurance education at the university level, and prepares and distributes consumer information.

LOMA (Life Office Management Association) ▪ Lynn Merritt, president, 5770 Powers Ferry Rd., Atlanta, GA 30327. Tel. 404- 951-1770. Worldwide association of insurance companies specializing in research and education, with a primary focus on home office management.

***Loss Executives Association** ▪ Bob Bergin, president, c/o Hanover Insurance Company, 100 North Parkway, Worcester, MA 01605. Tel. 617-853-7200. A professional association of property loss executives providing education to the industry.

***Metropolitan Chicago Loss Bureau** ▪ Robert Kissane, president, 343 S. Dearborn, Suite 1400, Chicago, IL 60604. Tel. 312-322-2500. Assists insurance companies with property claims adjustment and arson and fraud claims investigation.

National Association of Casualty and Surety Agents ▪ Ken A. Crerar, executive vice president, 600 Pennsylvania Ave., S.E. , Suite 308, Washington DC 20003. Tel. 202-547-6616. A trade organization dedicated to safeguarding the public interest, preserving a competitive market, and working with others for the good of the insurance business and the public.

National Association of Casualty and Surety Executives ▪ Lawrence M. Zippin, executive director, 1130 Connecticut Ave., NW, Washington, DC 20036. Tel. 202-828-7100. Organization to provide insurance companies and agents with a forum for discussion of industry problems relating to the public's interest.

National Association of Health Underwriters ▪ William F. Flood, executive vice president, 1000 Connecticut Ave., NW, Suite 1111, Washington, DC

20006. Tel. 202-223-5533. Professional association of persons engaged in the sale and service of disability income and hospitalization and major medical health insurance.

National Association of Independent Insurance Adjusters ▪ Robert M. Hall, president, 300 W.Washington St., Suite 805, Chicago IL 60606. Tel. 312- 853-0808. Association of claims adjusters and firms operating independently on a fee basis for all insurance companies.

National Association of Independent Insurers ▪ Lowell R. Beck, president, 2600 River Rd., Des Plaines, IL 60018. Tel. 708-297-7800. Trade association of fire, casualty and surety insurers.

National Association of Insurance Brokers, Inc. ▪ Michael Mullen, executive director, 1401 New York Ave., NW, Suite 720, Washington, DC 20005. Tel. 202-628-6700. Trade association of commercial insurance brokers.

National Association of Insurance Commissioners ▪ Sandra L. Gi fillan, executive vice president, 12 Wyandotte Plaza, 120 W. 12th St., Suite 1100, Kansas City, MO 64105. Tel. 816-842-3600. Organization of state insurance commissioners to promote uniformity in state supervision of insurance matters, and to recommend legislation in the various state legislatures.

National Association of Insurance Women ▪ Jane Seago, executive vice president, P.O. Box 4410, Tulsa, OK 74159. Tel. 918-744-5195. Fosters educational programs for members. Promotes public safety and service programs.

National Association of Life Underwiters ▪ Jack E. Bobo, executive vice president, 1922 F St., NW, Washington, DC 20006. Tel. 202-331-6000. Professional association representing life insurance agents.

National Association of Mutual Insurance Companies ▪ Larry Forrester, president, 3707 Woodview Trace, P.O. Box 68700, Indianapolis, IN 46268. Tel. 317-875-5250. Trade association of property and casualty mutual insurance companies.

National Association of Professional Surplus Lines Offices, Ltd. ▪ Richard Bouhan, executive director, 5746 N. Broadway, P.O. Box 28660, Kansas City, MO 64118. Tel. 816-455-3210. Professional association of wholesale brokers, excess and surplus lines companies, affiliates and supporting members.

National Association of Surety Bond Producers ▪ J. Martin Huber, executive vice president, 6931 Arlington Rd., Suite 308, Bethesda, MD 20814. Tel. 301-986-4166. Trade association of surety bond producers.

National Automobile Theft Bureau ▪ Paul W. Gilliland, president, 10330 S. Roberts Rd. 3A, Palos Hills, IL 60465. Tel. 708-430-2430. Conducts stolen vehicle recovery and auto theft prevention activities.

***National Committee on Property Insurance** ▪ Eugene L. Lecomte, president, Ten Winthrop Sq., Boston, MA 02110. Tel. 617- 423-4620. Provides advice and assistance to insurers writing property coverage in distressed or residual insurance markets.

National Conference of Insurance Guaranty Funds ▪ Dale Stephenson, president, Market Tower , Ten W. Market Street, Suite 1190, Indianapolis, IN 46204. Tel. 317-464-8199. Advisory organization to the state guaranty fund boards; gathers and disseminates information regarding insurer insolvencies.

***National Council on Compensation Insurance** ▪ William Hager, president, One Penn Plaza, 51st Floor, New York, NY 10119. Tel. 212-560-1000. Develops and administers rating plans and systems for workers' compensation insurance.

National Crop Insurance Services, Inc. ▪ Alan S. Walter, president, 7301 College Blvd., Suite 170, Overland Park, KS 66210. Tel. 913-451-0980. National trade association of insurance companies writing hail insurance, fire insurance, and insurance against other weather perils to growing crops, with rating and research services for crop-hail and rain insurers.

National Fire Protection Association ▪ [illegible]bert W. Grant, president, One Batterymarch Park, Quincy, MA 02269-9101. Tel. 617-770-3000. Independent, nonprofit source of information on fire protection, prevention and suppression; develops and publishes consensus fire safety standards; sponsors national Learn Not to Burn campaign.

National Independent Statistical Service ▪ David H. Conrad, president, Two N. Riverside Plaza, Chicago, IL 60606. Tel. 312-559-1450. National statistical agent and advisory organization for all lines of insurance except workers' compensation.

National Safety Council ▪ T.C. Gilchrest, president, 444 N. Michigan Ave., Chicago, IL 60611. Tel. 312-527- 4800. Provides national support and leadership in the field of safety; publishes safety materials of all kinds; conducts a public information and publicity program in support of safety.

***New York Board of Fire Underwriters** ▪ Alexander Pirnie, president, 85 John St., New York, NY 10038. Tel. 212-227- 3700. Supervises the Fire Patrol of New York City, conducts fire safety and electrical inspections, helps develop fire safety standards, and assists in the adjustment of fire insurance claims.

***New York Insurance Alliance** ▪ Kurt J. English, CPCU, CLU, CAE, president, 716 Seventh North St., Liverpool, NY 13088. Tel. 315-451-7412. A trade association servicing the property/casualty insurance industry in New York State.

***New York Property Insurance Underwriting Association** ▪ Richard G. Brueckner, president, 100 William St., New York, NY 10038. Tel. 212-208-9700. Provides basic fire insurance for New York State residents not able to obtain the coverage through the voluntary market.

Nonprofits Risk Management and Insurance Institute ▪ Charles Tremper, executive director, 1731 Connecticut Avenue, NW, Suite 300, Washington, DC 20009. Tel. 202-462-8190. Conducts research and education on risk management and insurance issues of special concern to nonprofit organizations.

Overseas Private Investment Corporation ▪ Ambassador Fred Zeder, president, 1615 M St., NW, Washington, DC 20527. Tel. 202- 457-7200. Self-sustaining U.S. government agency providing political risk insurance and finance services for U.S. investment in developing countries.

Professional Insurance Agents ▪ Donald K. Gardiner, executive vice president, 400 N. Washington St., Alexandria, VA 22314. Tel. 703-836-9340. Trade association of independent insurance agents.

Property Insurance Loss Register ▪ Gerald F. Murphy, vice president, 700 New Brunswick Ave., Rahway, NJ 07065. Tel. 201-388-0157. A voluntary, nonprofit organization administered by the American Insurance Services Group, Inc.; maintains a computerized registry of property loss claims which can be used by its subscribers to fight insurance fraud, and provides data for nonactuarial/statistical research.

Property Insurance Plans Service Office ▪ Eugene L. Lecomte, president, Ten Winthrop Sq., Boston, MA 02110. Tel. 617-423-4620. Provides technical and administrative services to state property insurance plans.

Public Risk Management Association ▪ Executive Director, 1117 North 19th Street, Suite 900, Arlington, VA 22209. Tel. 703-528-7701. Membership organization representing risk managers in state and local public entities.

Reinsurance Association of America ▪ Jack Blaine, president, 1819 L St., NW, 7th Floor, Washington, DC 20036. Tel. 202-293-3335. Trade association of property and casualty reinsurers; provides legislative services for members.

Risk and Insurance Management Society, Inc. ▪ Ron E. Judd, executive director, 205 E. 42nd St., New York, NY 10017. Tel. 212-286-9292. Organization of corporate buyers of insurance which makes known to insurers the insurance needs of business and industry, supports loss prevention, and provides a forum for the discussion of common objectives and problems.

Society of Certified Insurance Counselors ▪ William T. Hold, Ph.D., CIC, CPCU, CLU, president, 3630 North Hills Dr., Austin, TX 78731. Tel. 512-345-7932. National education program in property, liability and life insurance, with a continuing education requirement upon designation.

***Society of Chartered Property and Casualty Underwriters** ▪ Paul A. Synnott, Jr., CPCU, CLU, executive vice president, 720 Providence Rd., (CB No. 9), Malvern, PA 19355. Tel. 215-251-2728. Professional society to foster the higher education of those engaged in insurance and risk management; encourages and conducts research.

Society of Financial Examiners ▪ Penney DePas, executive director, 4101 Lake Boone Trail, Suite 201, Raleigh, NC 27607. Tel. 919-787-5181. Professional society for examiners of insurance companies, banks, savings and loans, and credit unions.

Society of Insurance Research ▪ Wayne Holdredge, president, Box 933, Appleton, WI 54912. Tel. 414-730-8858. Stimulates insurance research and fosters exchanges among society members on research methodology.

Society of Insurance Trainers and Educators ▪ Hank Drewes, executive director, P.O. Box 513, Cary, IL 60013. Tel. 708-516-1921. Professional organization of trainers and educators in insurance.

***Surety Association of America** ▪ Lloyd Provost, president, 100 Wood Ave. South, Iselin, NJ 08830. Tel. 201-494-7600. Statistical, rating, development, and advisory organization for surety companies.

***Texas Automobile Insurance Plan** ▪ Bobby White, manager, 3755 Capital of Texas Highway South, Suite 300, Austin, TX 78704-7927. Tel. 512-444-4441. Provides an open market for drivers unable to obtain liability insurance through commercial channels.

***Texas Automobile Insurance Service Office** ▪ Sherrell Kidd, manager, One La Costa, Suite 130, 1016 La Posada Dr., Austin, TX 78752. Tel. 512-458-

6347. Insurers' organization licensed to advise the State Insurance Board on auto forms, rates, rating procedures, classifications and coverages.

***Texas Catastrophe Property Insurance Association** ▪ Frank "Buddy" Rogers, manager, P.O. Box 2930, Austin, TX 78768. Tel. 512-444- 9611. Established by state legislature to provide back-up source for windstorm insurance in high risk area (14 coastal counties).

***Texas Insurance Advisory Association** ▪ Roy E. Hoga, general manager, P.O. Box 15, Austin, TX 78767-0015. Tel. 512- 444-9611. Insurers' organization to advise the State Insurance Board on property forms, rates, rating procedures, and coverages.

***Texas Medical Liability Insurance Underwriting Association** ▪ Joe A. Chilton, general manager, Centennial Tower, Suite 180, 505 E. Huntland Drive, Austin, TX 78752. Tel. 512-452-4370. Established by the state legislature to provide a source for medical malpractice insurance.

***Texas Workers' Compensation Assigned Risk Pool** ▪ Charles R. MacKay, CPCU, general manager, 8303 Mopac Expressway North, Suite 310, Austin, TX 78759. Tel. 512-345-1222. Provides workers' compensation insurance when unavailable through commercial channels.

Underwriters' Laboratories, Inc. ▪ Tom Castino, president, 333 Pfingsten Rd., Northbrook, IL 60062. Tel. 708-272-8800. Investigates and tests electrical materials and other products to determine that fire prevention and protection standards are being met.

Underwriters Salvage Company ▪ Christopher Knowles, chairman of the board, 1270 W. Northwest Highway, Palatine, IL 60067. Tel. 708-705-9550. Assists insurers in adjustment [illegible] sses through the reclamation, reconditioning and disposition of damaged go[illegible]s.

Washington Advocates for Highway & Auto Safety ▪ Bob Alexander, president, 1501 Fourth Avenue, Suite 1650, Seattle, WA 98101. Tel. 206-624-3927. A coalition of individuals and organizations advocating safety legislation in the State of Washington.

***Washington Insurance Council** ▪ D. McKay Snow, president, 1501 Fourth Ave., Seattle, WA 98101. Tel. 206-624- 3927. Provides education and information services to the public and to insurance companies, producer organizations, and other professional insurance groups.

***Western Insurance Information Service** ▪ Patricia Lombard, executive director, 3530 Wilshire Blvd., Suite 1610, Los Angeles, CA 90010. Tel. 213-738-5333. A consumer education service supported by the property/casualty insurance industry, operating in 10 western states.

Workers Compensation Reinsurance Bureau ▪ Gary G. Venter, president, Two Hudson Place, Hoboken, NJ 07030. Tel. 212-363-2950. An association of insurance companies which pool their workers' compensation excess losses as an alternative to purchasing reinsurance.

Workers Compensation Research Institute ▪ Dr. Richard B. Victor, executive director, 245 First St., Suite 1402, Cambridge, MA 02141. Tel. 617-494-1240. Organization supported by insurers and employers conducting independent, objective research on public policy issues in the workers' compensation system.

Member Companies and Groups, Insurance Information Institute

Aetna Casualty & Surety
- The Aetna Casualty & Surety Co.
- Aetna Casualty & Surety of America
- Aetna Lloyds of Texas Insurance Co.
- The Automobile Insurance Co. of Hartford
- The Casualty & Surety Co. of Illinois
- Farmington Casualty Co.
- The Standard Fire Insurance Co.

Agency Insurance Company of Maryland

Allstate Insurance Group
- Allstate Indemnity Co.
- Allstate Insurance Co.
- Allstate Property and Casualty Insurance Co.
- Northbrook Indemnity Co.
- Northbrook National Insurance Co.
- Northbrook Property and Casualty Insurance Co.

American Re-Insurance Co.

The Atlantic Mutual Companies
- Atlantic Mutual Insurance Co.
- Centennial Insurance Co.

Attleboro Mutual Insurance Co.

Bituminous Insurance Companies
- Bituminous Casualty Corporation
- Bituminous Fire & Marine Insurance Co.
- Great West Casualty

Chubb Group of Insurance Companies
- Alliance Assurance Co., Ltd.
- Chubb Custom Insurance Co.
- Chubb Insurance Company of New Jersey
- Chubb Lloyds Insurance Company of Texas
- Federal Insurance Co.
- Gan Anglo-American Insurance Company
- Great Northern Insurance Co.
- The London Assurance
- Northwestern Pacific Indemnity Co.
- Pacific Indemnity Co.
- Sea Insurance Co., Ltd.
- Sumitomo Marine & Fire Insurance Co., Ltd.
- Sun Insurance Office, Ltd.
- Texas Pacific Indemnity Co.
- Vigilant Insurance Co.

CIGNA Group
- Alaska Pacific Assurance Co.
- Allied Insurance Co.
- American Lloyds
- Atlantic Employers Insurance Co.
- Bankers Standard Fire & Marine
- Bankers Standard Insurance Co.
- California Union
- Century Indemnity Co.
- CIGNA Employers Insurance Company
- CIGNA Fire Underwriters Insurance Co.
- CIGNA Insurance Co.
- CIGNA Insurance Company of Illinois
- CIGNA Insurance Company of the Midwest
- CIGNA Insurance Company of Ohio
- CIGNA Insurance Company of Texas
- CIGNA Property and Casualty Insurance Co.
- Indemnity Insurance Co. of North America
- Insurance Co. of North America
- Pacific Employers Insurance Co.

Continental Insurance Companies
- The American Loyalty Insurance Co.
- Boston Old Colony Insurance Co.
- Buckeye Union Insurance Company
- Commercial Insurance Co. of Newark, New Jersey
- Continental Insurance Company
- Continental Insurance Company of New Jersey
- Fidelity and Casualty Insurance Co.
- Firemen's Insurance Co. of Newark, New Jersey
- The Glens Falls Insurance Co.
- Kansas City Fire & Marine Insurance Co.
- Mayflower Insurance Co.
- National–Ben Franklin Insurance Co. of Illinois
- Niagara Fire Insurance Co.

Crum & Forster Insurance Companies
- All West Insurance Co.
- California Insurance Co.
- Constitution Reinsurance Corp.
- Crum and Forster Insurance Co.
- Crum and Forster Underwriters Company of Ohio
- Industrial Indemnity Co.
- Industrial Indemnity Co. of Alaska
- Industrial Indemnity Co. of Idaho
- Industrial Indemnity Co. of the Northwest
- Industrial Insurance Co.
- Industrial Insurance Co. of Hawaii, Ltd.
- Industrial Underwriters Ins. Co.
- International Insurance Co.
- International Surplus Lines Insurance Co.
- LWB Syndicate Inc.
- Mt. Airy Insurance Co.
- National General Assurance Company
- North River Insurance Co.
- Premier Insurance Co.
- Star Insurance Co.
- United States Fire Insurance Co.
- Viking Insurance Company of Wisconsin
- Westchester Fire Insurance Co.

CUMIS Insurance Society, Inc.

DeSmet Farm Mutual Insurance Co.

Dorchester Mutual Insurance Co.

Employers Reinsurance Corporation

Excelsior Insurance Co.

Foundation Reserve Insurance Co., Inc.
- Lloyds of New Mexico Insurance Co.

General Accident Group
- Camden Fire Insurance Association
- GA Insurance Company of New York
- General Accident Insurance Co. of America
- General Assurance Company
- North Pacific Insurance Co.
- Oregon Automobile Insurance Co.
- PG Insurance Company of New York
- Pennsylvania General Insurance Co.
- Potomac Insurance Co. of Illinois

General Re Group
- General Reinsurance Corp.
- General Star Indemnity Co.
- General Star National Insurance Corp.
- North Star Reinsurance Corporation

Grange Mutual Insurance Co.

The Harford Mutual Insurance Co.

The Hartford Insurance Group
- First State Insurance Company
- Hartford Accident and Indemnity Co.
- Hartford Casualty Insurance Co.
- Hartford Fire Insurance Co.
- Hartford Insurance Company of Canada
- Hartford Insurance Company of Connecticut
- Hartford Insurance Co. of Illinois
- Hartford Insurance Co. of the Midwest
- Hartford Insurance Co. of the Southeast
- Hartford Lloyd's Insurance Co.
- Hartford Underwriters Insurance Co.
- New England Insurance Company
- New England Reinsurance Corp.
- Nutmeg Insurance Co.
- Pacific Insurance Co., Ltd.
- Sentinel Insurance Co., Ltd.
- Twin City Fire Insurance Co.

The Home Group
- City Insurance Company
- The Home Indemnity Company
- The Home Insurance Company
- The Home Insurance Company of Illinois
- The Home Insurance Company of Indiana

IRM Insurance

Maryland Casualty
- American General Fire and Casualty Company
- American General Lloyds Assurance Company of America
- Maine Bonding and Casualty Company
- Maryland Casualty Company
- National Standard Insurance Company
- Northern Insurance Company of New York
- Steadfast Insurance Company
- Valiant Insurance Company

The Merchants Property Insurance Co. of Indiana

Metropolitan Property and Casualty Insurance Group
- First General Insurance Co.
- Marketforce International Insurance Company
- Metropolitan Casualty Insurance Co.

Metropolitan General Insurance Co.
Metropolitan Property & Casualty Insurance Co.
Metropolitan Reinsurance Co.

Millville Mutual Insurance Co.

Montgomery Insurance Companies
Montgomery Indemnity Company
Montgomery Mutual Insurance Co.

Mountain States Mutual Casualty Co.

Munich American Reinsurance Co.

NAC Reinsurance Corporation

National Group Corporation

Nationwide Insurance
Colonial Insurance Company of California
Employers Insurance of Wausau A Mutual Company
Farmland Mutual Insurance Company
Illinois Employers Insurance of Wausau
National Casualty Company
Nationwide Agribusiness Insurance Company
Nationwide General Insurance Company
Nationwide Indemnity Insurance Co.
Nationwide Mutual Fire Insurance Co.
Nationwide Mutual Insurance Company
Nationwide Property & Casualty Insurance Company
Scottsdale Insurance Company
Wausau Underwriters Insurance Company

New York Casualty Insurance Co.

North American Reinsurance Corporation

Oregon Mutual Insurance Co.

PHICO Insurance Company

Philadelphia Reinsurance Corp.

The Reinsurance Corporation of New York

Republic Insurance Group
Blue Ridge Insurance Co.
Republic Insurance Co.
Republic Underwriters Insurance Co.
Republic-Vanguard Insurance Co.
Vanguard Insurance Co.
Vanguard Underwriters Insurance Company

Royal Insurance Company
American and Foreign Insurance Co.
Globe Indemnity Co.
Milbank Insurance Co.
Newark Insurance Co.
Royal Indemnity Co.
Royal Insurance Co. of America
Royal Lloyd's of Texas
Royal Special Risks Insurance Co.
Royal Surplus Lines Insurance Co.
Safeguard Insurance Co.

SAFECO Insurance Companies
First National Insurance Co. of America
General Insurance Co. of America
SAFECO Insurance Co. of America
SAFECO Insurance Co. of Illinois
SAFECO Lloyds Insurance Co.
SAFECO National Insurance Co.
SAFECO Surplus Lines Insurance Co.

Scor Reinsurance Co.

Selective Insurance Group
Selective Insurance Company of America
Selective Insurance Co. of South Carolina
Selective Insurance Co. of the Southeast
Selective Way Insurance Co.

Skandia America Group
American–European Reinsurance Corp.
Hudson Insurance Co.
Skandia America Reinsurance Corp.

Sorema North America Reinsurance Co.

Transamerica Insurance Group
Chilton Insurance Co.
Countrywide Insurance Co.
Fairmont Insurance Co.
Transamerica Fairmont Insurance Company of Colorado
Transamerica Indemnity Co.
Transamerica Insurance Co.
Transamerica Insurance Co. of Michigan
Transamerica Insurance Co. of New York
Transamerica Insurance Co. of Texas
Transamerica Insurance Corp. of America
Transamerica Premier Insurance Co.
Transamerica Reinsurance Co.
Transamerica Specialty Insurance Co.

Trenwick America Reinsurance Corporation

Union Mutual Fire Insurance Company

United Americas Insurance Company

USAA Group

- United Services Automobile Association
- USAA Casualty Insurance Co.
- USAA General Indemnity Co.

United States Fidelity & Guaranty Companies

- Fidelity and Guaranty Insurance Co.
- Fidelity and Guaranty Insurance Underwriters, Inc.
- United States Fidelity and Guaranty Co.

Utica Mutual Insurance Co.

- Graphic Arts Mutual Insurance Co.
- Republic–Franklin Insurance Co.

X.L. Insurance Company, Ltd.

Associate Members

- The Alliance Mutual Insurance Co.
- Allegany Co-Op Insurance Co.
- Benton Mutual Insurance Assn.
- Berlin Mutual County Fire Insurance Co.
- Briar Creek Mutual Insurance Co.
- Callicoon Co-Operative Insurance Co.
- Clark County Mutual Insurance Assn.
- Co-Operative Insurance Co. of Western New York
- Dunham & Chemung Mutual Insurance Co.
- Eppards Point Mutual County Fire Insurance Co.
- Farmers Mutual Fire Insurance of Tenn.
- Farmers Mutual Home Insurance Co.
- Farmers Union Mutual Fire Insurance Co.
- Fulmont Mutual Insurance Co.
- Genesee Patrons Cooperative Insurance Co.
- German Mutual Insurance
- Green Garden Farmers Fire Insurance Co.
- Harmony Mutual County Fire Insurance Co.
- Heritage Mutual Insurance Co.
- Industry Mutual County Fire Insurance Co.
- Kossuth Mutual Insurance Association
- Lakeland Mutual Insurance Co.
- LaPrairie Mutual Insurance Co.
- Livingston Mutual Insurance Co.
- Maple Valley Mutual Insurance Co.
- Mount Carroll Mutual Fire Insurance Co.
- Mutual Assurance Society of Virginia
- North Country Adirondack Cooperative Insurance Co.
- Patrons Mutual Insurance Association
- Randolph Mutual Insurance Co.
- Saucon Mutual Ins. Co.
- Security Mutual Insurance Association of Iowa
- Slavonic Mutual Fire Insurance Assn.
- Smyth County Mutual Insurance Co.
- SVEA Mutual Insurance Co.
- Tama County Mutual Insurance Assn.
- The Tri-County Mutual Insurance Co.

Index

ACCIDENT AND HEALTH INSURANCE, 17, 39
ACCIDENTS:
  aircraft, 91-92
  automobile (motor vehicle), 75, 86
  cost of, 75, 87-88
  fatalities from, 62-67, 75-80, 86-88, 91-92
  home, 86-87
  work-related, 87-88
ADVOCATES FOR HIGHWAY AND AUTO SAFETY, 10
AGENTS AND BROKERS, 13-14
AGE:
  drinking, by state, 104
  in arrests, 96-97
  of drivers in automobile accidents, 75-77
  of fire victims, 63
AIRCRAFT ACCIDENTS, 91-92
AIRCRAFT INSURANCE, 17, 39
ALLIED LINES, 16, 27, 37
ALTERNATIVE DISPUTE RESOLUTION MECHANISMS, 56-57
ARRESTS BY AGE, 96-97
ARSON, 63-64, 97
ASBESTOS CLAIMS, 89-91
ASSETS, INSURANCE INDUSTRY, 5
  of property/casualty insurers, 5, 17-18, 21
AUTOMOBILE ACCIDENTS, 75-86
AUTOMOBILE FINANCIAL RESPONSIBILITY LAWS, 100-101
AUTOMOBILE INSURANCE:
  claim costs, 80, 81-83
  collision, 80, 81-83
  commercial, 23
  compulsory, 100-101
  cost trends in, 48
  liability, 15, 22, 23
  no-fault, 101-102
  personal injury claims, 84-85, 101-102
  physical damage, 16, 23, 36
  private passenger, 16, 23, 36
AUTOMOBILE INSURANCE PLANS, 43-44
AUTOMOBILE SEAT BELTS, 102-103
AUTOMOBILES:
  costs for repair, 51, 81-84
  drivers of:
    in accidents, 76-80
    insured in shared market, 43-44
    laws or legislation affecting, 9-10, 106
    sex of, in accidents, 77-78
  low-speed crash tests of, 81-82
  thefts of, 96-99
BEACH AND WINDSTORM PLANS, 45
BOILER AND MACHINERY INSURANCE, 17, 31, 38
BONDS, SURETY & FIDELITY, 16, 30, 38
BURGLARY, 95-97
BURGLARY AND THEFT INSURANCE, 16, 31, 38
CATASTROPHES, LOSSES FROM, 68-70
CIVIL JUSTICE SYSTEM, 56-61
CLAIMS, INSURANCE:
  asbestos-related, 53, 90
  collision insurance, 82-84
  medical malpractice insurance, 54-56
  personal injury, automobile, 84-85
  workers compensation, 10-11, 89-91
COLLISION INSURANCE CLAIMS, 80, 82
COMMERCIAL MULTIPLE PERIL INSURANCE, 16, 25, 37
COMPULSORY AUTO INSURANCE, 100-101
CONSOLIDATED ASSETS, 17-18
COST OF LIVING INDEX, 49-51
CRASH TESTS OF AUTOMOBILES, 81-82
CRIME INSURANCE, FEDERAL, 48
CRIME, 95-99
CROP-HAIL INSURANCE, 26
DIRECT WRITTEN PREMIUMS, 34-39
DRUNK DRIVING, 78-79, 97, 103-106
EARNED PREMIUMS, 6
EARTHQUAKE INSURANCE, 39
EARTHQUAKES, LOSSES FROM, 74
EARTHQUAKE PROJECT, 11,
EMPLOYMENT IN INSURANCE, 13-14
FAIR ACCESS TO INSURANCE REQUIREMENTS (FAIR) plans, 44-45
FARMOWNERS MULTIPLE PERIL INSURANCE, 16, 25, 36
FATALITIES:
  from accidents, 86
    aircraft, 91-92
    automobile, 75-80
    home,86-87
    work-related, 87-88
  from earthquakes, 74
  from fires, 62-68
  from hurricanes, 70-72
  from tornadoes, 72-73
FIDELITY BONDS, 16, 30, 38
FINANCIAL GUARANTY, 16
FINANCIAL RESPONSIBILITY LAWS, 100-101
FIRE INSURANCE, 16, 27, 37
FIRES:
  causes of, 63-64, 66
  fatalities from, 62-68
  incendiary or suspicious, 64
  losses from, 62
  major, 66-68
  structural, 64-66
FIRST-PARTY AUTOMOBILE INSURANCE, 101- 102
FLOOD INSURANCE, 46-48
GENERAL LIABILITY INSURANCE, 16, 28
GLASS INSURANCE, 17,39

  crop insurance, 26
  Federal Crime Insurance, 48
  flood insurance, 46-48
  health, 93-94
GUARANTY FUNDS, INSURANCE, 41-42
HAIL STORMS, INSURANCE FOR, 26
HEALTH CARE, COSTS OF, 51-52, 93-94
HEALTH HAZARDS, WORKPLACE, 87-91
HEALTH INSURANCE, 39, 93
HOME ACCIDENTS, 86-87
HOMEOWNERS INSURANCE, 24, 36
HOSPITAL ROOM COSTS, 51-52
HOSPITALIZATION, COST OF, 93-94
HOUSEHOLD INSURANCE:
  cost trends in, 49
  ownership of, 14-15
HOUSING COSTS, 50
HURRICANES, LOSSES FROM, 70-72
INCOME:
  investment, 6, 19-21
  net, property/casualty insurers, 6
INCOME TAXES, 6
INLAND MARINE INSURANCE, 16, 32, 38
INSOLVENCY FUNDS, 41-42
INSURANCE:
  amounts, in major countries, 15
  companies in the United States, 5, 12-13
  employment in, 13-14
  liability, crisis in, 8-9, 54-61
  overview of, 5
  ownership of, 26
  world market for, 15
INVESTMENT INCOME, 6, 20-21
INVESTMENTS, TYPES OF, 21
JOINT UNDERWRITING ASSOCIATIONS (JUAS), 43
JURY VERDICTS, 53
LARCENY-THEFT, 95-99
LARGE-LOSS FIRES, 67-68
LAWSUITS, 53-57
LEGISLATION:
  affecting motorists, 100-106
  tort reform, 56-61
LIABILITIES, PROPERTY/CASUALTY INSURERS, 6, 17
LIABILITY, FEDERAL STANDARDS, 89-90
LIABILITY, PRODUCT, 53-54
LIABILITY INSURANCE:
  crisis in, 54-57
  general, 16, 28
  medical, 16, 29, 37, 54-56
MEDICAL CARE, COST TRENDS IN, 51
MEDICAL MALPRACTICE:
  insurance, 16, 29, 37
  lawsuits for, 54-56
MULTIPLE DEATH FIRES, 66-67
MULTIPLE PERIL INSURANCE, 24
NET INCOME, PROPERTY/CASUALTY INSURERS, 6, 19-21
NET PREMIUMS WRITTEN, 22
NUCLEAR INSURANCE, 33-34
OCCUPATIONAL ACCIDENTS, 86-88
OCCUPATIONAL DISEASE, 89-91
OCEAN MARINE INSURANCE, 16, 33, 38
OPERATING RESULTS, 6, 19-21
PERSONAL INJURY CLAIMS, 84-85
PERSONAL INJURY LAWSUITS, 53-54
PHYSICIANS' FEES, 51
POLICYHOLDER DIVIDENDS, 6, 18
POLICYHOLDERS' SURPLUS, 17-18
PREMIUM TAXES BY STATE, 40
PREMIUMS:
  direct written, 34-39
  growth rate, 16, 22
  in world market, 15
  net written, 16, 22
  use, by insurers, 18
PRODUCT LIABILITY LAWSUITS, 53-54
PROFITABILITY, 6, 20
PROPERTY/CASUALTY INSURANCE:
  companies, number by state, 12-13
  employment in, 13-14
  government regulation of, 6-9, 114-116
  purchases of, amounts of, 26
  review of, 5-6
  world market, 15
PUNITIVE DAMAGES, 57-58
RATE OF RETURN, ANNUAL, 20
REGULATION OF INSURANCE, 6-12
REINSURANCE FACILITIES, 43
RENTERS INSURANCE, 14-15
RESERVES, PREMIUM AND LOSS, 21
ROBBERY, 95-99
SALES EXPENSES, 18
SEAT BELTS, AUTOMOBILE, 102-103
SEX OF DRIVERS IN ACCIDENTS, 77-78
SHARED MARKETS, 43-45
STATUTORY ACCOUNTING, 20
STOCK MARKET AND INSURANCE, 21
SURETY BONDS, 16, 30, 38
TAXES:
  and net income, 6
  as percent of premium dollar, 18
  premium, by state, 40
THEFT:
  automobile, 96-99
  larceny, 95-99
THEFT INSURANCE, 16, 31, 38
TORNADOES, LOSSES FROM, 69-70, 72-73
TORT REFORM, 56-61
UNDERWRITING OPERATIONS, 6, 19-20
UNDERWRITING RESULTS, 6, 19-21
WINDSTORM INSURANCE PLANS, 45
WORK-RELATED ACCIDENTS, 87-88
WORKERS' COMPENSATION, 10-12, 16, 29, 37
WORLD INSURANCE MARKET, 15

Insurance Information Institute
110 William Street, New York, NY 10038 (212-669-9200)

Staff Officers

President—Mechlin D. Moore

Executive Vice President and Chief Operating Officer—Gordon C. Stewart

Executive Vice President—Charles C. Clarke

Senior Vice President and Economist—Sean F. Mooney, Ph.D., CPCU

Vice President and Secretary-Treasurer—Yvonne Pickett

Vice Presidents—Pamela A. Martin, Public Affairs; Edward O'Hare, Media Relations; Jeffrey A. Palca, Field Services; W. Daniel Poole, Publisher, *Insurance Review*; Cary Schneider, Subscriber Services; Barbara J. Taylor, Consumer Affairs and Education; Mary Zavada, Publications

Regional Offices

Eastern: Mary Ann Gillis, Manager, 110 William St., New York, NY 10038. Tel.: 212-669-9200.

Federal Affairs: Marc H. Rosenberg, Vice President, 1101 17th Street, NW, Suite 408, Washington, DC 20036. Tel.: 202-833-1580.

Mid-Atlantic: Timothy L. Dove, Manager, 1101 17th Street, NW, Suite 408, Washington, DC 20036. Tel.: 202-833-1580.

Midwestern: John Maes, Manager, 10 South Riverside Plaza, Suite 1620, Chicago, IL 60606. Tel.: 312-902-1799.

New England: William D. Kickham, Manager, One Liberty Square, Boston, MA 02109. Tel.: 617-482-2232.

Northwestern: Scott Carpenter, Regional Vice President, 1501 Fourth Ave., Suite 1650, Seattle, WA 98101. Tel.: 206-624-3330.

Western: Patricia Lombard, Regional Vice President, 3530 Wilshire Blvd., Suite 1610, Los Angeles, CA 90010. Tel.: 213-738-5333.

Southern: William J. Davis, Manager, 6 Executive Park Drive, NE, Suite 270, Atlanta, GA 30329. Tel.: 404-321-4615.

Texas Subscriber Office: Rick Gentry, Regional Vice President, 800 Brazos Street, Suite 4220, Austin, TX 78701. Tel.: 512-476-7025.

Western Insurance Information Service/Insurance Information Institute

Home Office: Patricia Lombard, Executive Director, 3530 Wilshire Blvd., Suite 1610, Los Angeles, CA 90010. Tel.: 213-738-5333.

Beaverton, Oregon: Marianne Macina, Manager, 11855 S.W. Ridgecrest Drive, Suite 107, Beaverton, OR 97005. Tel.: 503-643-6355.

Englewood, Colorado: Nancy Ritchey, Manager, 6565 South Dayton St., Suite 2400, Englewood, CO 80111. Tel.: 303-790-0216.

For Northern California: Marjorie M. Berte, Representative, Tel.: 415-398-2197 or 800-397-1679.

Washington Insurance Council: Scott Carpenter, Public Affairs Consultant, 1501 Fourth Avenue, Suite 1650, Seattle, WA 98101. Tel.: 206-624-3927.

Board of Directors

James J. Cutro, Vice Chairman & Chief Administrative Officer, Crum and Forster Corp., Chairman
Gerald A. Isom, President and Chief Executive Officer, Transamerica Insurance Company, Vice Chairman
John J. Martin, President, Personal Financial Security Division, Aetna Life & Casualty
Wayne E. Hedien, Chairman of the Board and Chief Executive Officer, Allstate Insurance Company
Edward K. Trowbridge, Chairman and Chief Executive Officer, Atlantic Mutual Insurance Company
Peter Lardner, President, Bituminous Insurance Companies
Gregory Georgieff, Managing Director & Senior Vice President, Chubb & Son, Inc.
Caleb L. Fowler, President, CIGNA P&C Companies
Steven J. Smith, Executive Vice President, The Continental Corporation
Walter E. Farnam, President & Chief Operating Officer, General Accident Insurance
John C. Etling, President and Chief Executive Officer, General Reinsurance Corporation
Donald R. Frahm, Chairman and Chief Executive Officer, The Hartford Insurance Group
Richard R. Savage, Senior Vice President, The Home Insurance Company
Michael G. Repoli, President & Chief Executive Officer, Maryland Casualty Company
Theodore J. Rupley, President and Chief Executive Officer, Metropolitan Property and Casualty Ins. Co.
F. David Rolwing, President, Montgomery Mutual Insurance Company
John N. Lombardo, President, Munich American Reinsurance Company
D. Richard McFerson, President, Nationwide Insurance Companies
Russell J. Seifert, President, Republic Insurance Group
Fred E. Dabney, II, Vice President - Corp.Comm., Royal Insurance
James W. Burkett, Senior Vice President - Field Operations, SAFECO Insurance Companies
Frederick H. Jarvis, Chairman, President and Chief Executive Officer, Selective Insurance
General Robert F. McDermott, Chairman, USAA
W. Minor Carter, Senior Vice President, United States Fidelity & Guaranty Company
W. Craig Heston, Chairman and Chief Executive Officer, Utica Mutual Insurance Company

Insurance
Information
Institute

110 William Street
New York, N.Y. 10038
(212) 669-9200

$18.00

ISBN 0-932387-23-3